University Academic Curriculum Vitæ of Andrea Janes

Personal information

Name: Andrea Alexander Janes
E-Mail: andrea.janes@unibz.it

Education since leaving school

- November 2001: <u>Master of Science</u> degree in Informatics and Economics (*Wirtschaftsinformatik* in German) at the Technical University of Vienna, Austria. Austrian title: *Mag. rer. soc. oec.*
- August 2014: <u>Doctor of technology</u> degree (with distinction) in computer science at the University of Klagenfurt, Austria. The doctorate was supervised by Prof. Gerhard Friedrich (University of Klagenfurt) and Prof. Giancarlo Succi (Free University of Bozen-Bolzano). Austrian title: *Dr. techn.*
- January 2020: <u>Habilitation as associate professor</u> (professore universitario di seconda fascia) in Italy in the field of *Sistemi di elaborazione delle informazioni (09/H1)*, i.e., Information processing systems.
- April 2021: <u>Habilitation as associate professor</u> (professore universitario di seconda fascia) in Italy in the field of *Informatica (01/B1)*, i.e., Computer Science.
- January 2023: <u>Title of docent</u> at the University of Oulu in the field of *Software measurement*[1].

Present appointment

Job title: Associate professor for the academic discipline INF/01 (Informatics), academic recruitement field 01/B1 (Informatics)
Start/end: Since 1.3.2024
Employer: Free University of Bozen/Bolzano
Place of work: Bolzano, Italy
Brief description of responsibilities: Research and teaching in the academic discipline INF/01 (Informatics), knowledge transfer (third mission), and participation in the collegial and governing bodies of the university.

Experience in academic teaching

This section lists my experience in academic teaching, provides an overview about the teaching evaluations, and illustrates significant personal achievements in teaching including thesis supervision. Upcoming lectures are marked in gray. The name of the lecture is reported in the teaching language; if it is not English, I provide the translation as a footnote.

Org.	Course	Role[2]	BSc	MSc	Ac. year	ECTS
unibz	Tools and Techniques for Software Testing	TA	X		'23/24	6
unibz	Contemporary Software Development[3]	L		X	'19/20–'23/24	6
unibz	Software Quality and Metrics[4]	L		X	'23/24	6

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[1] https://www.oulu.fi/en/university/faculties-and-units/faculty-information-technology-and-electrical-engineering/empirical-software-engineering-software-systems-and-services
[2] Lecturer (L), Teaching Assistant (TA), or Coach (C).
[3] as external lecturer in 2022/23 and 2023/24
[4] as external lecturer in 2023/24

Org.	Course	Role	BSc	MSc	Ac. year	ECTS
fhv	Software Engineering[5]	L		✕	'23/24	8
fhv	Fachgespräche zum Software Engineering[6]	L		✕	'23/24	4
fhv	Grundlagen der Wirtschaftsinformatik[7]	C		✕	'23/24	1½
fhv	Softwareprozesse und -qualität[8]	L	✕		'23/24	4
fhv	Refactoring und Migration[9]	L	✕		'23/24	4
uibk[10]	Methods of Software Quality Assurance	L	✕		'22/23	3
fhv	System architectures	L	✕		'22/23	5
fhv	Enterprise Applikationen[11]	C	✕		'22/23	10
fhv	Softwareprozesse[12]	L		✕	'22/23	5
fhv	Architekturen und Sicherheit in verteilten Systemen[13]	L	✕		'22/23	3
fhv	Parallelization and Concurrent Programming[14]	L		✕	'22/23–'23/24	4
unibz	Software Development: from the idea to the product[15]	L			'20/21	3
unibz	Application Engineering for Business Informatics	L	✕		'19/20–'21/22	6
unibz	Systems Engineering	L	✕		'19/20	6
unibz	Internet and Mobile Services[16]	L	✕		'18/19	6
unibz	Project Management and Professional Ethics[17]	L	✕		'18/19	3
unibz	Software Factory	L		✕	'17/18, '18/19	8
unibz	Software Process Management	L		✕	'14/15–'16/17	8
unibz	Architectures of Digital Systems	L	✕		'11/12, '12/13, '14/15–'16/17	8
unibz	Project and Team work management	L	✕		'14/15	3
unibz	Empirical Software Measurement	TA	✕		'11/12	8
unibz	Introduction to Management Engineering	TA	✕		'10/11	4
unibz	Open Tools for IT Management	TA	✕		'10/11	4
unibz	Computer Networks	TA	✕		'09/10, '10/11	4
unibz	Requirements and Design of Software Systems	L		✕	'09/10, '10/11, '13/14	8
unibz	Technology Assessment	TA	✕		'09/10, '10/11	4
unibz	Analysis	TA	✕		'09/10	4
unibz	Software Quality Management	L		✕	'07/08	4
unibz	Programming Languages	TA	✕		'07/08	4
unibz	Software Architectures	TA		✕	'06/07, '07/08	4
unibz	Internet Technologies II	TA	✕		'06/07, '07/08	4
unibz	Requirements Engineering	L		✕	'05/06	4
unibz	Laboratorio di tecnologie informatiche[18]	L		✕	'05/06, '06/07	4
unibz	Software per la didattica dell'informatica[19]	L		✕	'05/06, '06/07	4
unibz	Didattica dell'Informatica I[20]	L		✕	'06/07	4
unibz	Software Engineering Project	TA	✕		'04/05, '05/06	8

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[5] In English: *Software engineering*

[6] In English: *Expert discussions on software engineering*

[7] In English: *Fundamentals of business informatics*. Course of 9 ECTS, I taught 1 module of 5.

[8] In English: *Software processes and quality*

[9] In English: *Refactoring and Migration*

[10] University of Innsbruck, Austria

[11] In English: *Enterprise applications*

[12] In English: *Software processes*

[13] In English: *Architectures and security in distributed systems*

[14] as external lecturer in 2024

[15] Taught as a course in the *Studium Generale*, an interdisciplinary study programme available to the general public. See https://www.unibz.it/en/faculties/further-courses/studium-generale/.

[16] Taught together with Panagiotis Symeonidis

[17] Taught together with Christian Mörtl

[18] In English: *Information technology laboratory*

[19] In English: *Software for teaching computer science*

[20] In English: *Didactics of computer science I*

Org.	Course	Role	BSc	MSc	Ac. year	ECTS
unibz	Programming Project	TA	X		'02/03, '03/04	8
unibz	Algorithms & Complexity	TA	X		'02/03	4

Summary of significant personal achievements in teaching

I think teaching is an integral part of scientific work as it confronts students with the latest developments in the research area and it challenges me to be concise, clear, and to point out the practical value of what I research.

When teaching at university level, I mainly adopt a <u>Constructivist Learning</u> approach, which is based on the idea that individuals construct their own understanding and knowledge of the world around them through their experiences and interactions with it. In a teaching context, the consequence is that students should be actively involved in the learning process and that they should be encouraged to construct their own understanding of the material being taught, rather than simply receiving information from me.

It is my goal to not primarily show to students "how something has to be done", but to help them understand the intentions behind methods and technologies, how they can be supported, and what might obstruct them. Through real-world problems and hands-on projects or experiments, I aim to develop the students' problem solving strategies; reading academic papers and watching the original talks of scientists, I want to demystify research and prepare them to be able to consume directly the results of research in their future work. <u>Blended Learning</u> is not only used as a teaching method to engage students, but as a method to familiarize them with research products such as papers, presentations, and technical reports.

I see my role as a facilitator of learning rather than to simply transmit information, and to provide support and guidance as students work to construct their own understanding of the material.

Therefore, in my courses I require students to read the material themselves, retrieve data and additional material from the Internet themselves, implement the teachings of the course in form of a project, and demonstrate and challenge their knowledge solving cases and discussing them among each other.

Such a <u>Flipped Classroom</u> approach, in which students are expected to read the course material outside of class and then come prepared to apply and expand upon that knowledge through activities and discussion, helps me adopting the constructivist principles of learning in a more personalized and differentiated way: students able to work through the material at their own pace and come to class with their own questions and ideas. This is particularly important at the Master's level, where there are often students coming from different backgrounds and different levels of experience with the particular subjects.

When designing the course, I aim for <u>Constructive Alignment</u>, i.e., I first define the desired teaching goals and then determine the methods I will adopt to assess if the course goals have been achieved. I then choose teaching and learning activities that help students satisfy the assessment criteria. I regularly evaluate the alignment of goals, activites, and assessment.

To organize the course activities, I apply the AVIVA model[21], which divides a course into five phases: arrive and tune in (students find out about the learning objectives and the program), reactivate prior knowledge (prior knowledge is discussed), inform (students engage with the prepared resources), process (students actively apply and consolidate their knowledge), and finally assess (the learning success is evaluated)[22].

To evaluate a student's work, I apply constructive alignment and assess the achieved course objectives using intermediate and final exams; I prefer to see the lab as a "safe space", in which students are not evaluated but free to try out things and to develop their own "error culture". The highlights of my personal achievements in teaching are:

- Individual opinions of the students in the semester feedback questionnaire:
    - "Ein Highlight dieses Semesters war Janes Andrea. Seine Lehrveranstaltungen sind genau das, was ich mir unter einem Masterstudium vorgestellt habe. Es werden tolle Themen interessant vorgetragen und mit sinnvollen Aufgaben angewendet. Dabei sind die Aufgaben so gestaltet, dass man sich wirklich mit dem Thema beschäftigen kann, ohne ein Gefühl von Zeitdruck zu haben. So macht es wirklich Spaß, auch mal selbst nachzulesen, um die Aufgaben gut umzusetzen. Andrea scheint nicht nur für seine Themen, sondern auch für das Lehren begeistert zu sein. Hier fällt es leicht, erfolgreich zu lernen[23]."
    - "I don't know if it makes any sense, but the 'transparency' of the teacher. The lectures felt more like having a chat with a colleague than a university lecture, which is a very good thing."
    - "Unkomplizierte, angenehme Vortragsweise; Vorlesung und Übungen zielen auf das Verständnis des Themas ab, man kann sich wirklich mit dem Inhalt und den Konzepten beschäftigen, anstatt sinnlos irgendwelchen übertriebenen Aufgaben hinterherhechten zu müssen[24]."
    - "Ehrenmann Dozent[25]."
- Best teacher award: I won the award for the best teacher at the Faculty of Computer Science of unibz in 2017, based on student votes. I was already nominated in 2013 and 2014.
- Studium Generale: In 2020, I taught the course *Software Development: from the idea to the product* for the interdisciplinary study programme "Studium Generale" available to the general public at unibz, 3 ECTS.

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[21]Christoph Städeli, Markus Maurer, Claudio Caduff & Manfred Pfiffner, 2021: Das AVIVA-Modell im Blended Learning: Fünf Säulen einer guten Unterrichtsvorbereitung. Transfer, Berufsbildung in Forschung und Praxis (3/2021), SGAB, Schweizerische Gesellschaft für angewandte Berufsbildungsforschung.

[22]In German: *Ankommen und einstimmen, Vorwissen aktivieren, Informieren, Verarbeiten und Auswerten.*

[23]In English: *A highlight of this semester was Janes Andrea. His courses are exactly what I thought a master's degree would be. Great topics are presented in an interesting way and applied with meaningful assignments. At the same time, the assignments are designed in such a way that you can really engage with the topic without feeling a sense of time pressure. So it's really fun to do some reading on your own to implement the tasks well. Andrea seems to be passionate not only about his subjects, but also about teaching. It's easy to learn successfully here.*

[24]In English: *Uncomplicated, pleasant lecture style; lecture and exercises are aimed at understanding the subject, you can really engage with the content and concepts instead of pointlessly chasing after some over-engineered assignments.*

[25]In English: *The docent is a person whom one can trust.*

- <u>Lectures for high school students</u>: I participated to an initiative to give presentations in high schools to motivate students to attend the university and to study Computer Science with the following presentations: *Cost accounting in software engineering*, *Agile software engineering*, and *Change of perspective: functional programming using Elixir*.
- <u>Internships for high school students</u>: In 2018, '19, '21, and '22, I hosted students from the high schools Galileo Galilei, Max Valier, and Franz Kafka. I involved them in various projects, e.g., a software to match voting preferences with political opinions for the newsmagazine FF or on software to track climbers.
- <u>EURAC Junior Science Camp</u>: In 2013, the EURAC Junior Science Camp introduced 17- to 18-year-old high school students to various areas of science, and I gave a one-day workshop on robot programming.
- <u>JuniorUni</u>: In the years 2011–'13 and 2015–'19, I contributed to the project *JuniorUni*, which aims to present scientific topics to children. Together with children of different age groups I constructed and programmed Lego Mindstorm robots. I visited kindergartens, elementary and middle schools in South Tyrol to teach programming concepts (instructions, loops and conditions) to entire school classes using Lego robots.
- <u>Thesis supervision</u>: on the following pages I list the theses I supervised or currently supervise. I do this also to show the topics of my research since many theses mark the beginning of a line or research or investigate a part of an ongoing research project.

Number, author, and title of the <u>PhD</u> thesis[26]	C[27]	Yr.
1. S. S. *Optical Flow Estimation*		'22
2. S. A. *A non-invasive approach to software development analytics*		'15

Number, author, and title of the <u>master</u> thesis	C E[28]	Yr.
1. M. V. *db2c – Übergang zu standardisiertem Datenbankzugriff unter Verwendung von Codegenerierung basierend auf Templates in einem datenbankgestützten Ansatz*		'23
2. D. M. *Towards a reference architecture for ETL pipelines, validated in the Erlang ecosystem and the DNN context*		'23
3. A. B. *Software Development Process Support for Microfrontends*		'23
4. F. P. *Extending a data-driven application with Event Sourcing*		'22
5. D. S. *Configurable and resource efficient framework for data and command transmission over LoRaWAN*	✕	'22
6. T. K. *Log diagnosis and error detection in the field of electric mobility*		'22
7. L. F. *Generation of Nutritional Natural Language Comments for Recipes*	✕	'22
8. B. K. *Interactively Learning of Personalised Constraints for Food Recommendations*	✕	'22
9. A. V. *Damage Detection of Powertrains based on Acoustic Signatures*		'20
10. L. S. *Bug or not bug: commit classification using weak supervision*	✕	'20
11. G. S. S. *Designing and Implementing a Scalable and Modular Microservice Architecture for Smart Cities*		'20
12. G. R. *Application of the edge computing paradigm for the deployment of a camper prediction system: a Case Study*	✕	'20

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[26]The name of the student is anonymized, the full name is available upon request.
[27]If I supervised a thesis as a co-supervisor, I mark it in this column using ✕.
[28]If this thesis was written during an Erasmus stay or an international MSc curriculum, I mark it in this column using ✕.

Number, author, and title of the <u>master</u> thesis	C	E	Yr.
13. A. M. *The Electronic Health Record (EHR) of South Tyrol – A Case Study*			'19
14. D. F. *Identifying Microservices in a Monolithic Application: A Process Mining Approach*			'18
15. M. M. *Architectural design of a mobile sales force application in a medium-sized company: requirements analysis, architecture development, and evaluation*			'18
16. Y. K. *Relating Business Data from the Specification Level to Respective Associated Variables and Accessor Methods in the Source Code*	×	×	'16
17. H. K. V. T. *An empirical investigation on the relationship between refactoring and software bugs*	×	×	'16
18. M. M. *Analyzing user interface activities using process mining*			'16
19. D. J. *Ensuring relevance in semantic search system development*			'15
20. S. K. *A method for performing indoor positioning using Bluetooth beacons*	×		'15
21. P. P. *Implementation and Analysis of an Energy Saving Kernel-Level Extension in Android OS*			'15
22. P. D. *Software quality strategies of SMEs: an Open Source approach*			'15
23. S. C. *SmartMetering using IBM BlueMix*			'15
24. A. K. *Managing Dependencies and Business Goal Alignment in Software Measurement Programs*			'15
25. S. S. *Privacy e confidenzialità in un app per la sanità digitale*			'15
26. M. M. *Detecting bad smells in meetings using active RFID tags*			'13
27. R. G. *Automatic extraction of competences of developers*	×		'13
28. K. M. *Landscape Optimization by offering virtualized data access methods using SAP In Memory technology*	×	×	'13
29. D. H. *Improving automated requirement traceability in modified code*	×		'12

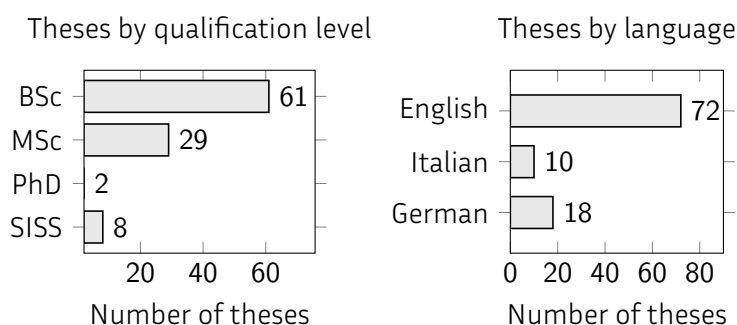| Number, author, and title of the <u>bachelor</u> thesis	C	Yr.
1. N. S. *Entwicklung eines Language Servers zur Anzeige von Qualitätsproblemen im Quellcode (in progress)*		'24
2. N. H. *Visual Studio Code-Erweiterung zur Anzeige fehlerhafter Variablennamen mittels Emojis (in progress)*		'24
3. A. K. *Ermittlung des Energieverbrauchs von Anwendungen (in progress)*		'24
4. A. W. *Automatische Korrekturen von Softwarearchitekturaufgaben (in progress)*		'24
5. A. B. *Visual Studio Code-Erweiterung zur Anzeige von Code smells (in progress)*		'24
6. M. P. *COBOL Modernization: A Comparative Study of Conversion Strategies*		'23
7. M. E. *Kollaborationsplattform zur Einsatzplanung bei Umweltkatastrophen*		'23
8. J. M. *KMT: Monitoring-Tool zur Früherkennung von Supportvorfällen)*		'23
9. L. T. *Development of a Sensor-based Portable Data Collection System for Climbers*		'22
10. D. S. *Analysis of Support Tickets: a Case Study*		'22
11. B. S. *Proposing Microservice Cuts in a Monolith: a Process Mining Approach*		'22
12. C. C. *HelpArt: a Walk-through to Help Artisans Envisioning the Internet of Things*		'22
13. M. F. *Fake: a Simulator for Microservice-based Applications*		'22
14. D. F. *Investigating the attractiveness of smart bathrooms: a case study*		'22
15. V. A. P. *Unity WebGL application for interactive multiuser meetings*		'22
16. N. M. *Tracking the activity of visitors during an event: the Snowdays experience*		'22

Number, author, and title of the <u>bachelor</u> thesis	C	Yr.
52. V. H. *Autocomplete for CNC-Programmers*		'14
53. D. F. *Vertical Life: Migration einer Android Anwendung in iOS*		'14
54. M. B. *Mobile Sales: eine mobile Applikation für die Auftragsverwaltung für Handelsvertreter*		'13
55. M. M. *Online–Plattform für die Vermittlung von Gelegenheitsarbeiten für die Generation 50Plus*		'13
56. P. G. *FireAlarm Mobile: Die Entwicklung eines Alarmiersystems für die Feuerwehren Südtirols*		'13
57. P. P. *Dashboarding in Microsoft Design Language (formerly known as Metro Design)*		'13
58. R. V. *Using LEGO NXT robots for children education*	✕	'12
59. F. O. *Dube: A Web Application for the Distribution and Update of Data Processing and Visualization Components*		'12
60. M. C. *Extracting and Representing Application Dependencies from Software Process Data*	✕	'06
61. T. W. *Misurazione non-invasiva per la stima dell'effort di requisiti espressi in linguaggio naturale*	✕	'06

I also supervised students in the Bressanone for the Faculty of Education at the "Scuola per la specializzazione dell'educazione secondaria"[29] (SISS). The students I supervised, together with the title of their theses, and the year of completion are:

Number, author, and title of the <u>SISS</u> thesis	Yr.
1. L. M. *Il modello relazionale per le basi di dati*	'07
2. M. N. *Didattica assistita da strumenti per presentazioni multimediali nella comune pratica d'aula: funzioni, scope e passaggio dei parametri*	'07
3. M. V. *Le certificazioni informatiche nel contesto scolastico*	'07
4. A. C. *L'algebra di Boole*	'06
5. G. C. *La crittografia: principali metodologie e applicazioni*	'06
6. C. M. F. *L'8086 e la programmazione assembly*	'06
7. G. C. *Introdurre la programmazione ai principianti: un approccio tramite Logo e Java*	'06
8. G. F. *I reati informatici*	'06

The following charts show the distribution of the theses I supervised by qualification level and language.

Theses by qualification level

BSc — 61
MSc — 29
PhD — 2
SISS — 8

Number of theses

Theses by language

English — 72
Italian — 10
German — 18

Number of theses

So far, <u>I supervised 100 theses</u>, including those that are ongoing.

Postgraduate supervision (PhD level)

In the last 5 years (2019–2024), I supervised 1 PhD student in the subject area Computer Vision. Please, see also the point "thesis supervision" above.

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[29] In English: *School for the spezialization of secondary education*

Other academic responsibilities

This section presents the appointments to faculty and university boards, external appointments at national and international level, responsibilities for organizing conferences and seminars, and editorial and reviewing activities.

External appointments at national and international level

Organization	Year/s	Responsibilities
University of Maribor, Slovenia	'13	External commission member for the master defense of M. G. [30].
Province of Bozen-Bolzano, Italy	'14	Teacher for the subjects *Requirements engineering* and *KPI management* during a course organized for the IT requirements management office.
NOI Techpark, Italy	'17–22	Member of the *SFSCon Stakeholder Meeting* to define the theme of the conference and the topics to publish on the call for presentations.
SMBS University of Salzburg Business School, Salzburg, Austria	'20	Teacher of the module *Praxis-Workshop – Big Data im eigenen Unternehmen* (Practical workshop - Big Data in your own company), together with Diego Calvanese.
INNOS GmbH, Austria	'20	Teacher of the module *Datenmanagement mit Microservices*[31] during the webinar *Datenbanken und deren effiziente Verwendung*[32].
NOI Techpark, Italy	'19–22	Member of the *Digital Community Meeting* to exchange experiences between the research institutions, companies, and startups present at the NOI Technology park working in the digital field.
Province of Bozen-Bolzano, Italy	since '21	Reviewer for innovation, research, and development projects submitted to the Autonomous Province of Bozen/Bolzano (provincial law 14/2006).
University of Jyväskylä, Finland	'22	Invited Speaker for an inforte.fi[33] seminar, presenting how to *Promote your research in Industry and Academia*.
unibz	'22/23	External lecturer for a part (4 months out of 6) of the course *Contemporary Software Development*.
uibk	'23	External lecturer for the course *Methoden der Software Qualitätssicherung*, in English: *Software quality assurance methods*.
Dublin City University, Ireland	'22	External Examiner for the master thesis of N. L. [34] titled *Examining the use of dynamic data when undertaking monolith to microservice architecture migration*.
Tampere University, Finland	'23	Examiner and Opponent for the doctoral thesis of S. M. titled *Applications of MLOps in the Cognitive Cloud Continuum*.
Università degli Studi di Cagliari, Italy	'23	External Examiner of the "Commissione per gli esami finali del XXXV Ciclo"[35].

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[30] The name of the student is anonymized, the full name is available upon request.

[31] In English: *Data management with microservices*

[32] In English: *Databases and their efficient use*

[33] http://inforte.jyu.fi

[34] The name of the student is anonymized, the full name is available upon request.

[35] In English: *Commission for the final examinations of the XXXV Cycle*

Responsibilities for organizing conferences and seminars

Date/s	Event	Responsibilities
4.12.11–6.12.11	2011 Alpine Software Engineering Workshop, Corvara, Italy (ASEW 2011)	Organizing committee member
2.12.12–4.12.12	2012 Alpine Software Engineering Workshop, Ortisei, Italy (ASEW 2012)	Organizing committee member
6.5.14–9.5.14	10th International Conference on Open Source Systems, San Jose, Costa Rica (OSS 2014)	PC member & PhD Symposium chair
22.9.14–23.9.14	3rd International Conference on Software Engineering for Defence Applications, Rome, Italy (SEDA 2014)	PC member & Program chair
25.5.15–29.5.15	16th International Conference on Agile Software Development, Helsinki, Finland (XP 2015)	PC member (Estimations in the 21st Century Software Engineering)
26.8.15–28.8.15	41st Euromicro Conference on Software Engineering and Advanced Applications, Funchal, Madeira, Portugal (SEAA 2015)	PC member (Software Value Management)
28.4.16–29.4.16	1st Joint Seminar in Empirical Software Engineering at the Free University of Bozen-Bolzano (JESE 2016)	Organizer
6.12.16–6.12.16	2016 Alpine Software Engineering Workshop: Random-Based Testing, Bolzano, Italy (ASEW 2016)	Organizer
22.4.17–26.4.17	1st International Workshop on Monitoring in Large-Scale Software Systems, L'Aquila, Italy (co-located with the 8th ACM/SPEC International Conference on Performance Engineering) (MOLS 2017)	PC member
18.5.17–19.5.17	2nd Joint Seminar in Empirical Software Engineering at the University of Innsbruck (JESE 2017)	Co-organizer
21.5.17–26.5.17	1st International Workshop on Microservices for Agile Software Development, Cologne, Germany (co-located with the 18th International Conference on Agile Processes in Software Engineering and Extreme Programming) (WMSA 2017)	Co-organizer
6.7.17–6.7.17	8th Workshop on Computer Science Research meets Business, Bolzano, Italy: Data Science, How to Create added Value from Data	Organizing committee member
3.9.17–6.9.17	1st International Conference on Lean and Agile Software Development, Prague, Czech Republic (LASD 2017)	PC member
4.9.17–7.9.17	2017 Summer School on Software Engineering, Bolzano, Italy (SESchool 2017)	Organizing committee member
21.9.17–23.9.17	3rd Joint Ontology Workshops, Episode 3: The Tyrolean Autumn of Ontology, Bozen-Bolzano, Italy (JOWO 2017)	Track co-chair (Data meets Applied Ontologies)
29.11.17–1.12.17	18th International Conference on Product-Focused Software Process Improvement, Innsbruck, Austria (PROFES 2017)	PC member (Full Papers) & Session chair
21.5.18–25.5.18	19th International Conference on Agile Softwaren Development, Porto, Portugal (XP 2018)	PC member (Research Papers)
28.8.18–31.8.18	44th Euromicro Conference on Software Engineering and Adv. Applications, Prague, Czech Republic (SEAA 2018)	PC member (Monitoring Large-Scale Software Systems)

Date/s	Event	Responsibilities
9.9.18– 12.9.18	2nd International Conference on Lean and Agile Software Development, Poznań, Poland (LASD 2018)	PC member
9.9.18– 12.9.18	2018 Summer School on Software Engineering, Bolzano, Italy (SESchool 2018)	Organizing committee member
23.9.18– 29.9.18	34th International Conference on Software Maintenance and Evolution, Madrid, Spain (ICSME 2018)	PC member (Artifacts)
28.11.18– 30.11.18	19th International Conference on Product-Focused Software Process Improvement, Wolfsburg, Germany (PROFES 2018)	PC member (Full Research and Industry Papers)
21.5.19– 25.5.19	20th International Conference on Agile Software Development, Montréal, Canada (XP 2019)	PC member (Research Paper)
8.7.19– 10.7.19	12th Seminar on Advanced Techniques & Tools for Software Evolution, Bolzano, Italy (SATToSE 2019)	PC member, Hackaton chair & Session chair
1.9.19– 4.9.19	3rd International Conference on Lean and Agile Software Development, Leipzig University, Leipzig, Germany (LASD 2019)	PC member
10.9.19– 12.9.19	2019 Summer School on Software Engineering, Bolzano, Italy (SESchool 2019)	Organizing committee member
11.9.19– 13.9.19	12th International Conference on the Quality of Information and Communications Tech., Ciudad Real, Spain (QUATIC 2019)	PC member (Quality Aspects in Software Maintenance and Comprehension)
30.9.19– 4.10.19	35th IEEE International Conference on Software Maintenance and Evolution, Cleveland, Ohio, USA (ICSME 2019)	PC member (Short Papers)
27.11.19– 29.11.19	20th International Conference on Product-Focused Software Process Improvement, Barcelona, Catalunya, Spain (PROFES 2019)	PC member (Full Research and Industry Papers)
15.1.20– 3.6.20	Reality Check: IT students meet companies, a bi-monthly event, organized together with the NOI Technology park in Bolzano, open to all bachelor, master, and PhD students, to allow companies to present themselves to students and to help students to get to know the local IT landscape, Bolzano, Italy	Organizer
8.6.20– 12.6.20	21st International Conference on Agile Software Development, Copenhagen, Denmark (XP 2020)	PC member (On-site Research)
1.7.20– 3.7.20	6th International School on Software Engineering, Bolzano, Italy (ISESchool 2020)	Organizing committee member
26.8.20– 27.8.20	16th International Symposium on Open Collaboration, Madrid, Spain (OpenSym 2020)	PC member (OpenSym 2020 New Ideas and Emerging Research)
6.9.20– 9.9.20	4th International Conference on Lean and Agile Software Development, Sofia, Bulgaria (LASD 2020)	PC member
8.9.20– 11.9.20	13th International Conference on the Quality of Information and Communications Technology, online (QUATIC 2020)	PC member (Human and Artificial Intelligences for Software Evolution)
11.11.20– 11.11.20	18. Anwenderkonferenz zu Softwarequalität, Test und Innovation, Bolzano, Italy (ASQT 2020)	PC member
25.11.20– 27.11.20	21st Int. Conference on Product-Focused Software Process Improvement, Turin, Italy (PROFES 2020)	PC member (Full Research Papers and Short Papers)

Date/s	Event	Responsibilities
23.1.21– 23.1.21	5th International Conference on Lean and Agile Software Development, online (LASD 2021)	PC member
23.5.21– 24.5.21	4th International Conference on Technical Debt, online (TechDebt 2021)	PC member (Tool Papers)
7.6.21– 8.6.21	Summer School in HPC and AI, Bolzano, Italy	Organizing committee member
8.9.21– 11.9.21	14th International Conference on the Quality of Information and Communications Technology, online (QUATIC 2021)	PC member (Software Evolution)
25.11.21– 26.11.21	22nd Int. Conference on Product-Focused Software Process Improvement, Turin, Italy (PROFES 2021)	PC member (Full Research Papers and Short Papers)
11.11.21– 11.11.21	19. Anwenderkonferenz zu Softwarequalität, Test und Innovation, Bolzano, Italy (ASQT 2021)	PC member
27.10.21– 27.10.21	2nd Workshop on Data for Smart Health, Bolzano, Italy (D4SH 2021)	Session chair (Industry and Public Governance)
22.1.22– 22.1.22	6th International Conference on Lean and Agile Software Development, Sofia, Bulgaria (LASD 2022)	PC member
17.5.22– 18.5.22	5th International Conference on Technical Debt, Pennsylvania, USA (TechDebt 2022)	PC member (Tool Papers) & Session chair (Machine Learning for Technical Debt)
22.8.22– 24.8.22	International Workshop on Applied Research, Technology Transfer and Knowledge Exchange in Software and Data Science, Vienna, Austria (co-located with the 33rd DEXA Conferences and Workshops) (ARTE 2022)	PC member
31.8.22– 2.9.22	Euromicro Conference on Software Engineering and Advanced Applications, Maspalomas, Gran Canaria, Spain (SEAA 2022)	Track co-chair (Cloud Native And Dev Ops)
19.9.22– 23.9.22	16th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement, Helsinki, Finland (ESEM 2022)	PC member (Registered Reports)
2.10.22– 7.10.22	38th IEEE International Conference on Software Maintenance and Evolution, Limassol, Cyprus (ICSME 2023)	PC member (New Ideas and Emerging Results and Registered Reports)
3.10.22– 4.10.22	22nd IEEE International Working Conference on Source Code Analysis and Manipulation, Limassol, Cyprus (SCAM 2022)	PC member (New Ideas and Emerging Results)
21.11.22– 24.11.22	23rd International Conference on Product-Focused Software Process Improvement, Jyväskylä, Finland (PROFES 2022)	Track co-chair (Doctoral Symposium) & PC member
13.3.23– 17.3.23	20th IEEE International Conference on Software Architecture, l'Aquila, Italy (ICSA 2023)	PC member (Poster track)
27.3.23– 2.4.23	7th International Conference on Lean and Agile Software Development (Track on Lean and Agile Software Development at the 38th ACM/SIGAPP Symposium On Applied Computing), Tallinn, Estonia (LASD 2023)	PC member
20.5.23– 20.5.23	4th Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering, Melbourne, Australia (co-located with the 45th International Conference on Software Engineering) (GE@ICSE 2023)	Workshop co-chair
14.5.23– 15.5.23	International Conference on Technical Debt, Melbourne, Australia (TechDebt 2023)	PC member

Date/s	Event	Responsibilities
14.6.23– 16.6.23	27th International Conference on Evaluation and Assessment in Software Engineering, Oulu, Finland (EASE 2023)	Track co-<u>chair</u> (Short Papers and Posters)
15.7.23– 15.7.23	49th Euromicro Conference on Software Engineering and Advanced Applications, Durres, Albania (SEAA 2023)	Track co-<u>chair</u> (Emerging Computing Technologies)
17.7.23– 20.7.23	17th IEEE International Conference on Service-Oriented System Engineering, Athens, Greece (SOSE 2023)	PC member
11.9.23– 13.9.23	16th International Conference on the Quality of Information and Communications Technology, Aveiro, Portugal (QUATIC 2023)	PC member & Track co-<u>chair</u> (Journal First and Special Issue <u>chair</u>)
18.9.23– 22.9.23	17th European Conference on Software Architecture, Istanbul, Turkey (ECSA 2023)	PC member
2.10.23– 3.10.23	23rd IEEE International Working Conference on Source Code Analysis and Manipulation, Bogotà, Colombia (SCAM 2023)	PC member (SCAM 2023 NIER Track)
10.10.23– 12.10.23	5th International Conference on Microservices (Microservices 2023)	PC member
23.10.23– 27.10.23	17th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement, New Orleans, Louisiana, United States (ESEM 2023)	PC member (Registered Reports)
24.10.23– 26.10.23	10th European Conference On Service-Oriented And Cloud Computing, Larnaca, Cyprus (ESOCC 2023)	PC member & Projects and Industry Track <u>chair</u>
6.11.23– 8.11.23	14th Symposium on Software Performance, Karlsruhe, Germany (SSP 2023)	PC member
11.12.23– 13.12.23	24rd International Conference on Product-Focused Software Process Improvement, Dornbirn, Austria (PROFES 2023)	Program co-<u>chair</u>
13.3.24– 17.3.24	1st Workshop on Edge Software Architecture, Hyderabad, India (co-located with the 21st IEEE International Conference on Software Architecture) (ESA 2024)	Workshop co-<u>chair</u>
12.3.24– 15.3.24	31st International Conference on Software Analysis, Evolution and Reengineering, Rovaniemi, Finland (SANER 2024)	Track co-<u>chair</u> (Industrial Track)
8.4.24– 12.4.24	8th International Conference on Lean and Agile Software Development (Track on Lean and Agile Software Development at the 39th ACM/SIGAPP Symposium On Applied Computing), Avila, Spain (LASD 2024)	PC member
24.4.24– 25.4.24	16th Software Quality Days Conference, Vienna, Austria (SWQD 2024)	PC member
15.4.24– 16.4.24	21st International Conference on Mining Software Repositories, Lisbon, Portugal (MSR 2024)	PC member (Data and Tool Showcase track)
20.4.24– 20.4.24	5th Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering, Lisbon, Portugal (co-located with the 46th International Conference on Software Engineering) (GE@ICSE 2024)	Workshop co-<u>chair</u>
28.4.24– 29.4.24	19th International Conference on Evaluation of Novel Approaches to Software Engineering, Angers, France (ENASE 2024)	PC member

Date/s	Event	Responsibilities
17.5.24–17.5.24	29th International Conference on Information Society and University Studies, Kaunas, Lithuania (IVUS 2024)	PC member
4.6.24–8.6.24	21th IEEE International Conference on Software Architecture, Hyderabad, India (ICSA 2024)	PC member (Poster track)
8.7.24–10.7.24	19th International Conference on Software Technologies, Dijon, France (ICSOFT 2024)	PC member
17.7.23–20.7.23	18th IEEE International Conference on Service-Oriented System Engineering, Shanghai, China (SOSE 2024)	PC member
26.8.24–28.8.24	32nd International Conference on Information Systems Development, Gdansk, Poland (ISD 2024)	PC member (Lean and Agile Software Development and Managing IS Development and Operations tracks)
28.8.24–30.8.24	50th Euromicro Conference on Software Engineering and Advanced Applications, Paris, France (SEAA 2024)	Track co-chair (Emerging Computing Technologies)
2.9.24–6.9.24	18th European Conference on Software Architecture, Luxembourg, Luxembourg (ECSA 2024)	PC member (Doctoral Symposium)

Editorial and reviewing activities

- Guest editor (issue accepted by editor):

  - Special Issue on Software Product and Process Improvement. *Information and Software Technology*. Andrea Janes and Valentina Lenarduzzi (eds.), 2023.
  - Special Issue: Gender Equity, Diversity, and Inclusion in Software Engineering. *Journal of Systems and Software*. Letizia Jaccheri, Lafifa Jamal, Andrea Janes, Valentina Lenarduzzi, and Vandana Singh (eds.), 2023.
  - Special Issue: Quality of Information and Communications Technology. *Information and Software Technology*. Guilherme Horta Travassos, Andrea Janes, Valentina Lenarduzzi (eds.), 2023.

- Reviewed papers from the following academic conferences and workshops: ARTE '22; ASQT '20, '21; ECSA '23, '24; ENASE '24; ESEM '22, '23; ESOCC '23; ICSA '23, '24; ICSME '18, '19, '23; ICSOFT '24; ISD '24; IVUS '24; LASD '17, '18, '19, '20, '21, '22, '23, '24; MOLS '17; MSR '24; Microservices '23; OSS '14; OpenSym '20; PROFES '17, '18, '19, '20, '21, '22, '23; QUATIC '19, '20, '21, '23; SATToSE '19; SCAM '22, '23; SEAA '15, '18, '22, '23, '24; SEDA '14; SOSE '23, '24; SSP '23; SWQD '24; TechDebt '21, '22, '23; XP '15, '18, '19, '20.
- I reviewed papers from the following journals:

Year/s	Journal
'13–'19	International Journal of Software Engineering and Knowledge Engineering (IJSEKE)
since '14	Information and Software Technology (IST)
since '16	Software Quality Journal (SQJ)
since '18	Empirical Software Engineering (EMSE)
since '18	Journal of Software: Evolution and Process
'19–'23	IEEE Access
since '20	Journal of Systems and Software (JSS)
since '20	ACM Transactions on Services Computing (TSC)

Year/s	Journal
since '21	ACM Transactions on Interactive Intelligent Systems (TiiS)
since '21	Expert Systems with Applications
sicne '22	IEEE Transactions on Software Engineering (TSE)

Memberships
− Associazione Gruppo di Informatica (GRIN)[36]

Research and scholarship

This section lists research stays and visits abroad, summarizes significant achievements in research and scholarship, and lists obtained research grants.

Research stays and visits abroad

Date/s	Description
9.10.06– 14.7.14	Since I did my doctorate in Klagenfurt, Austria, from 2002 to 2014 while working at unibz, I often had longer stays at the University of Klagenfurt. As part of my doctorate, I collaborated with Carinthian companies to conduct studies on how my research tools worked or how they needed to be adapted to achieve the desired research goal.
30.7.12– 16.8.12	Research stay in Tarrytown, USA, to establish and conduct research collaborations with organizations in the New York area.
21.7.13– 13.8.12	Research stay in San Francisco, USA, to establish and conduct research collaborations with organizations in the San Francisco area.
2.2.15– 22.2.15	Research stay at the Technical University of Tampere, Finland, Department of Pervasive Computing, collaborating with T. M. [37] and K. S. to develop new ways to monitor the development process.
6.5.15– 15.5.15	Research stay at the Technical University of Tampere, Finland, Department of Pervasive Computing, collaborating with T. M. and K. S. to develop new ways to monitor the development process.
1.6.15– 30.11.15	Research stay at the Software Competence Center Hagenberg, Department of Software Analytics and Evolution, collaborating with J. P. to study how to extract knowledge from source code.
16.9.18– 20.9.18	Research stay at the Technical University of Tampere, Finland, Department of Pervasive Computing, to discuss possible collaborations the software engineering research group of K. S. and D. T. .
14.6.22– 24.6.22	Research stay at the University of Tampere, Finland, collaborating with K. S. and D. T. on fault detection methods within microservice architectures.
6.9.22– 13.9.22	Research stay at the University of Tampere, Finland, collaborating with V. L. and D. T. on open tracing tools and on microservice architectures.
since 1.11.22	Hochschullehrer (Senior Lecturer) at the FHV Vorarlberg University of Applied Science in Vorarlberg, Austria.

Summary of significant achievements in research and scholarship

So far, I published 23 journal papers, 84 conference papers, 1 book chapter, 2 edited books, and 1 authored book. The latter was accessed more than 25000 times on Springer[38].

To date, my work has been cited 2173 times according to Google Scholar[39] (h-index: 23) and 1175 times according to Scopus[40] (h-index: 17). I obtained €816281,10 in research funds.

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[36] http://www.grin-informatica.it/opencms/opencms/grin
[37] The name of the researcher is anonymized, the full name is available upon request.
[38] https://link.springer.com/book/10.1007/978-3-642-00503-9
[39] https://scholar.google.com/citations?user=8lYoEEQAAAAJ
[40] https://www.scopus.com/authid/detail.uri?authorId=7003421075

Please find the underlined highlights of my research and scholarship below.

Yr/s.	Description
'05-14	I participated in the creation of a non-invasive measurement approach (i.e., a way to measure that does not disturb the development team during measurement) for software. My main contribution is the measurement of software development processes and is documented in my doctoral thesis.
'12	I coined the expression *the dark side of Agile software development* to describe an extreme view on Agile development, published in the paper of the same name in the 2012 ACM international symposium on New ideas, new paradigms, and reflections on programming and software.
'14	I transferred the experience gained from developing non-invasive measurement techniques to the development of a measurement-based approach to Lean Software Development published in 2014 in form of the monograph of 393 pages titled *Lean Software Development In Action*.
'12	Best paper award for the paper *Improving the identification of traceability links between source code and requirement* at the 18th International Conference on Distributed Multimedia Systems (DMS 2012).
'16	Best paper award for the paper *An Android Kernel Extension to Save Energy Resources Without Impacting User Experience* at the 13th International Conference on Mobile Web and Intelligent Information Systems (MobiWis 2016).
'17	Together with Roberto Confalonieri, I designed, developed, and evaluated a website for technology transfer (the current web site of the Smart Data Factory[41]) presenting: 1) 30 collaboration offers from various researchers of the faculty of computer science, including the description of the offer, inputs, outputs, costs, and contacts. 2) 24 past projects useful for companies as an example of our research describing the overall goal of the project, the specific objectives, key technologies, applications, and contacts. 3) the mission of the Smart Data Factory. 4) the skills of the faculty (presenting 13 research groups describing their mission, relevance, research topics, key technologies, applications, and contact). 5) the developed collaboration process between academia and industry. 6) collaboration opportunities for job-seekers, students, and companies. 7) contacts and news of the Smart Data Factory team.
'20	ACM Distinguished Paper Award at ICSE 2020 for the paper *Big Code != Big Vocabulary: Open-Vocabulary Models for Source code* at the ACM/IEEE 42nd International Conference on Software Engineering (ICSE 2020).
'21	Nominated for best Paper Award (top three papers) for the paper *A Multivariate Characterization and Detection of Software Performance Antipatterns* at the ACM/SPEC International Conference on Performance Engineering (ICPE 2021).
'22	Winner, together with D. F. [42], B. S. , and E. H. of the Hackathon Challenge of the Progress Group using genetic algorithms and simulated annealing at the South Tyrol Free Software Conference (SFSCon 2022).
'23	Top Ten downloaded paper on SSRN's list for CompSciRN: Other Computing Methodology (Topic)[43] and Computing Methodology eJournal[44] of the paper titled *Microservice Anti-Patterns and Bad Smells. How to Classify, and How to Detect Them. A Tertiary Study* during the time period of Dec 15, 2022–Feb 13, 2023
'24	Keynote at the 5th International Conference on Microservices about *Microservice performance engineering*[45]

[41]https://smart.inf.unibz.it
[42]The name of the participant is anonymized, the full name is available upon request.
[43]https://papers.ssrn.com/sol3/topten/topTenResults.cfm?groupingId=3191602&netorjrnl=jrnl
[44]https://papers.ssrn.com/sol3/topten/topTenResults.cfm?groupingId=3191574&netorjrnl=jrnl
[45]https://www.conf-micro.services/2023/keynotes/

Research grants

The following table lists the research grants I received as Principal Investigator (PI), in that case I list myself as the first award holder, or as Co-PI.

Date[46]	Award holder(s)	Funding body	Title	Received amount
1.5.11	Andrea Janes	Commissioned research	Allineamento processi alla strategia per miglioramento continuo processi PA (IanusPA)	3 957.38
21.7.11	Andrea Janes	Commissioned research	Risk Management and Communication on Local and Regional Level (RimaComm)	3 000.00
1.6.14	Andrea Janes	unibz	Embedded Software QUAlity (ESQUA)	9 000.00
22.5.15	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund[47]	Joint seminar series *Empirical Software Engineering* (JESE)	7 000.00
22.5.15	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund	visiting Local companiEs to chAnge the stuDents' pERception of the local IT landscape (LEADERIT)	9 000.00
22.5.16	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund	Joint seminar series *Empirical Software Engineering* (JESE2)	7 500.00
22.5.16	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund	visiting Local companiEs to chAnge the stuDents' pERception of the local IT landscape (LEADERIT2)	7 500.00
30.5.16	Andrea Janes	unibz	Value based test case prioritization and random test case generation (VBT)	20 000.00
1.7.16	Davide Taibi, Andrea Janes	unibz	Recommendation Techniques for Software Quality Improvement in Small Medium Enterprises (SQuaSME)	20 000.00
6.7.17	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund	Predictive modeling in software and security engineering (PROSE)	10 800.00
6.7.17	Andrea Janes, Michael Felderer, Fabio Massacci	Euregio Mobility Fund	Participation to summer schools (SUMMER)	10 800.00
31.8.17	Ricci Francesco, Andrea Janes	Commissioned research	Internet of Things for Climbers (IoTforC)	5 000.00
11.9.18	Andrea Janes	Commissioned research	Provisioning 4.0 (Pro4)	9 400.00
1.1.19	Andrea Janes	European Regional Development Fund[48]	Sensors and data for sports activity analysis (SALSA)	458 316.25
1.4.19	Anton Dignös, Andrea Janes	Commissioned research	Survey on Databases in South Tyrol (SDST)	10 800.00

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[46] Date on which the research grant was awarded.
[47] http://www.europaregion.info/it/euregio-mobilitaetsfonds.asp
[48] https://ec.europa.eu/regional_policy/en/funding/erdf/

Date	Award holder(s)	Funding body	Title	Received amount
15.1.19	Andrea Janes	unibz	User interaction based obsolete feature identification and maintenance vs. removal cost estimation (REACT)	3 381.79
16.1.19	Panagiotis Symeonidis, Andrea Janes	Commissioned research	Recommender for TV Shows (RecTV)	10 000.00
24.1.19	Angelika Peer, Andrea Janes	Commissioned research	NOIx - Service robot demonstrator for the NOI Techpark (NOIx)	39 600.00
1.10.19	Romain Robbes, Andrea Janes	unibz	ADaptive software VERBosity (ADVERB)	100 000.00
1.1.20	Panagiotis Symeonidis, Andrea Janes	unibz	Privacy-preserving Explainable AI for Health (HealthExplAI)	4 775.68
1.1.20	Andrea Janes	Commissioned research	Recommender for TV Shows (RecTV)	10 000.00
1.7.20	Andrea Janes, Matteo Camilli	unibz	Mining user-intensive applications to support value-based engineering decisions (VAMPIRE)	6 450.00
1.1.21	Matteo Camilli, Andrea Janes	unibz	Automated Performance and Scalability Analysis of Microservices Systems (AMPERE)	25 000.00
21.1.22	Barbara Russo, Andrea Janes	Commissioned research	Capture-Store-and-replay with GUI testing to define usage profiles and automate testing in a staging environment (Oberalp2021)	10 000.00
1.11.22	Andrea Janes	Commissioned research	Development of a user interface for robots interacting with hotel guests (TEMI)	15 000.00

Total funding received so far: €816 281.10.

Publications (in chronological order, starred if significant publication)
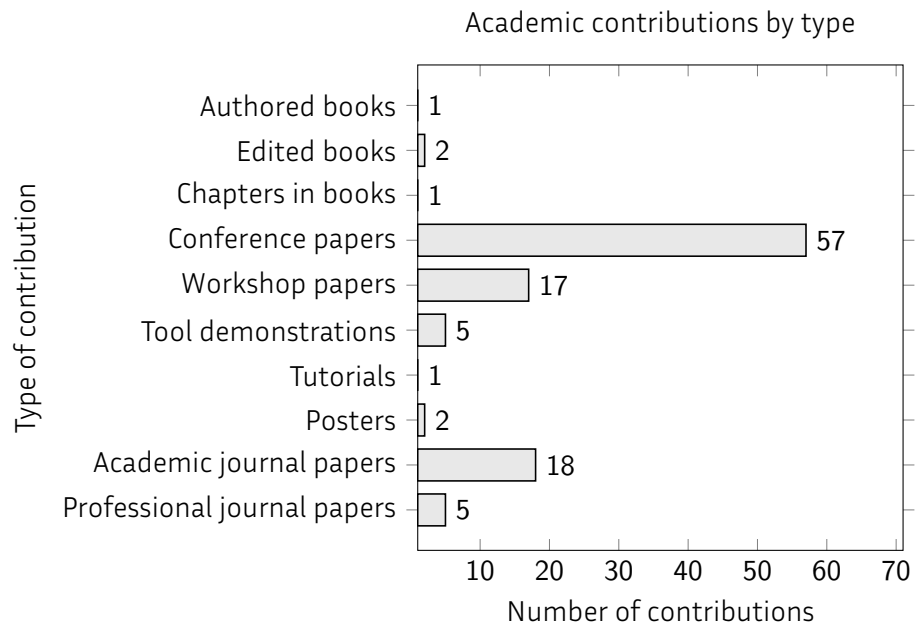
Order of authors: as it is practice in mathematical fields[49], I think that joint research is a sharing of ideas and skills that cannot be attributed to individuals separately. Determining which person contributed which ideas is often meaningless because the ideas grow from complex discussions among all partners. Therefore, I personally prefer to name authors in alphabetical order. The citation style follows the APA (American Psychology Association) style, 7th edition[50].

Overview

While simply counting papers is not a comprehensive indicator of academic output, the statistics about published articles are presented here as a means of providing an overview. A comprehensive evaluation of a researcher should include multiple criteria and consider the broader impact of their work.

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[49] http://www.ams.org/profession/leaders/CultureStatement04.pdf
[50] See e.g., https://guides.library.uq.edu.au/referencing/apa7

Academic contributions by type

Books (authored)

✳ 1. Andrea Janes & Giancarlo Succi (2014). *Lean Software Development In Action*. Springer. https://doi.org/10.1007/978-3-642-00503-9

Books (edited)

1. Regine Kadgien, Andreas Jedlitschka, Andrea Janes, Valentina Lenarduzzi & Xiaozhou Li (Eds.) (2023). *Product-Focused Software Process Improvement — 24th International Conference, PROFES 2023, Dornbirn, Austria, December 10–13, 2023, Proceedings, Part I*. Springer Cham. https://doi.org/10.1007/978-3-031-49266-2
2. Regine Kadgien, Andreas Jedlitschka, Andrea Janes, Valentina Lenarduzzi & Xiaozhou Li (Eds.) (2023). *Product-Focused Software Process Improvement — 24th International Conference, PROFES 2023, Dornbirn, Austria, December 10–13, 2023, Proceedings, Part II*. Springer Cham. https://doi.org/10.1007/978-3-031-49269-3

Chapters in books

1. Andrea Janes (2018). Non-distracting, Continuous Collection of Software Development Process Data. In Nalepa G., Baumeister J. (Eds.), *Synergies Between Knowledge Engineering and Software Engineering. Advances in Intelligent Systems and Computing, vol. 626*. (pp. 275–294). Springer. https://doi.org/10.1007/978-3-319-64161-4_13

Conference papers

1. Andrea Janes, Barbara Russo, & Giancarlo Succi (2002, November 05). *Use of Pair Programming for Experience Exchange in a Distributed Internship Project* [Workshop paper]. Pair Programming Explored (co-located with the 17th ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications) (OOPSLA), Seattle, MA, USA.

2. Andrea Janes (2003, May 25–29). *Measuring the Effectiveness of Agile Methodologies Using Data Mining, Knowledge Discovery and Information Visualization* [Conference paper]. 4th International Conference on Extreme Programming and Agile Processes in Software Engineering (XP), Genova, Italy. https://doi.org/10.1007/3-540-44870-5_79

3. Alberto Sillitti, Andrea Janes, Giancarlo Succi, & Tullio Vernazza (2003, May 9). *Non-invasive Measurement of the Software Development Process* [Workshop paper]. 1st International Workshop on Remote Analysis and Measurement of Software Systems (co-located with the 25th International Conference on Software Engineering) (RAMS), Portland, OR, USA.

4. Alberto Sillitti, Andrea Janes, Tullio Vernazza, & Giancarlo Succi (2003, June 23–26). *Measures for Mobile Users* [Conference paper]. International Conference on Software Engineering Research and Practice (SERP), Las Vegas, NV, USA.

5. Alberto Sillitti, Andrea Janes, Giancarlo Succi, & Tullio Vernazza (2003, September 1–6). *Collecting, Integrating and Analyzing Software Metrics and Personal Software Process Data* [Conference paper]. 29th Euromicro Conference (EUROMICRO), Belek-Antalya, Turkey. https://doi.org/10.1109/EURMIC.2003.1231611

6. Andrea Janes, Barbara Russo, Paolo Zuliani, & Giancarlo Succi (2003, May 25–29). *An Empirical Analysis on the Discontinuous Use of Pair Programming* [Conference paper]. 4th International Conference on Extreme Programming and Agile Processes in Software Engineering (XP), Genova, Italy. https://doi.org/10.1007/3-540-44870-5_26

7. Michela Dall'Agnol, Andrea Janes, Giancarlo Succi, & Enrico Zaninotto (2003, May 25–29). *Lean Management – A Metaphor for Extreme Programming?* [Conference paper]. 4th International Conference on Extreme Programming and Agile Processes in Software Engineering (XP), Genova, Italy. https://doi.org/10.1007/3-540-44870-5_4

8. Andrea Janes (2004, April 1–3). *Providing decision-making support using non-invasive business process metrics collection* [Workshop paper]. Alpine Software Engineering Workshop (ASEW), Heiligenblut, Austria.

9. Alberto Sillitti, Andrea Janes, Giancarlo Succi, & Tullio Vernazza (2004, April 5–7). *Monitoring the Development Process with Eclipse* [Conference paper]. 2004 International Conference on Information Technology: Coding and Computing (ITCC), Las Vegas, NV, USA. https://doi.org/10.1109/ITCC.2004.1286609

10. Alberto Sillitti, Andrea Janes, Giancarlo Succi, & Tullio Vernazza (2004, June 21–24). *Measuring the Architecture Design Process* [Conference paper]. 2004 International Conference on Software Engineering Research and Practice (SERP), Las Vegas, NV, USA.

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✳ 11. Alberto Avritzer, Vincenzo Ferme, Andrea Janes, Barbara Russo, André van Hoorn, Henning Schulz, Daniel S. Menasché, & Vilc Queupe Rufino (2020). Scalability Assessment of Microservice Architecture Deployment Configurations: A Domain-based Approach Leveraging Operational Profiles and Load Tests. *Journal of Systems and Software, 165*, 110564. https://doi.org/10.1016/j.jss.2020.110564

✳ 12. Vilc Queupe Rufino, Mateus Schulz Nogueira, Alberto Avritzer, Daniel Sadoc Menasché, Barbara Russo, Andrea Janes, Vincenzo Ferme, André van Hoorn, Henning Schulz, & Cabral Lima (2020). Improving Predictability of User-Affecting Metrics to Support Anomaly Detection in Cloud Services. *IEEE Access, 8*, 198152–198167. https://doi.org/10.1109/ACCESS.2020.3028571

✳ 13. Matteo Camilli, Andrea Janes, & Barbara Russo (2022). Automated test-based learning and verification of performance models for microservices systems. *Journal of Systems and Software, 187*, 111225. https://doi.org/10.1016/j.jss.2022.111225

✳ 14. Alberto Avritzer, Ricardo Britto, Catia Trubiani, Matteo Camilli, Andrea Janes, Barbara Russo, André van Hoorn, Robert Heinrich, Martina Rapp, Jörg Henß, & Ram Kishan Chalawadi (2022). Scalability testing automation using multivariate characterization and detection of software performance antipatterns. *Journal of Systems and Software, 193*, 111446. https://doi.org/10.1016/j.jss.2022.111446

15. Stefano Savian, Mehdi Elahi, Andrea Janes, & Tammam Tillo (2023). Benchmarking Equivariance for Deep Learning Based Optical Flow Estimators. *Signal Processing: Image Communication, 111*, 116892. https://doi.org/10.1016/j.image.2022.116892

16. Samuel Runggaldier, Gabriele Sottocornola, Andrea Janes, Fabio Stella, Markus Zanker (2023). Booker Prediction from Requests for Quotation via Machine Learning Technqiues. *Tourism and Hospitality Management, 29*(1), 25-43. https://doi.org/10.20867/thm.29.1.3

17. Andrea Janes, Xiaozhou Li, & Valentina Lenarduzzi (2023). Open Tracing Tools: Overview and Critical Comparison. *Journal of Systems and Software, 204*, 111793. https://doi.org/10.1016/j.jss.2023.111793

18. Tomas Cerny, Amr S. Abdelfattah, Abdullah Al Maruf, Andrea Janes, Davide Taibi (2023). Catalog and Detection Techniques of Microservice Anti-patterns and Bad Smells: A Tertiary Study. *Journal of Systems and Software, 206*(2023), 111829. https://doi.org/10.1016/j.jss.2023.111829

Journal papers in professional journals

1. Andrea Janes, Alberto Sillitti, & Giancarlo Succi (2013). Effective dashboard design. *Cutter IT Journal, 26*(1), 17-24. https://www.cutter.com/article/effective-dashboard-design-417046

2. Saulius Astromskis, Andrea Janes, Alberto Sillitti, & Giancarlo Succi (2013). Supporting governance in disciplined agile delivery using non-invasive measurement and process mining. *Cutter IT Journal, 26*(11), 25–29. https://www.cutter.com/article/supporting-governance-disciplined-agile-delivery-using-noninvasive-measurement-and-process

3. Saulius Astromskis, Andrea Janes, Alberto Sillitti, & Giancarlo Succi (2013). Implementing organization-wide Gemba using noninvasive process mining. *Cutter IT Journal, 26*(4), 32–36. https://www.cutter.com/article/implementing-organization-wide-gemba-using-noninvasive-process-mining-417146

4. Andrea Janes (2015). Supporting Software Infrastructure Management through Dashboards. *Cutter IT Journal, 28*(5), 34–39. https://www.cutter.com/article/supporting-software-infrastructure-management-through-dashboards-470241

5. Andrea Janes (2015). Practical Lean Software Development for Micro-Enterprises. *Cutter IT Journal, 28*(6), 30–35. https://www.cutter.com/article/practical-lean-software-development-microenterprises-470271

Self-archived preprint articles

1. Sadaf Moaveninejad, Andrea Janes (2022). Climbing Routes Clustering Using Energy-Efficient Accelerometers Attached to the Quickdraws [Journal paper in preparation]. *CoRR abs/2211.02680*, https://doi.org/10.48550/arXiv.2211.02680

2. Sadaf Moaveninejad, Andrea Janes (2023). Lowering Detection in Sport Climbing Based on Orientation of the Sensor Enhanced Quickdraw [Journal paper in preparation]. *CoRR abs/2301.10164*, https://doi.org/10.48550/arXiv.2301.10164

3. Dario Amoroso d'Aragona, Luca Pascarella, Andrea Janes, Valentina Lenarduzzi, Rafael Penaloza, Davide Taibi (2023). Breaks and Code Quality: Investigating the Impact of Forgetting on Software Development. A Registered Report [Journal paper in preparation]. *arXiv:2305.00760*, [ht tps://doi.org/10.48550/arXiv.2305.00760](https://doi.org/10.48550/arXiv.2305.00760)

Publications about the applicant

To date, my work has been cited 2173 times according to Google Scholar[51] and 1175 times according to Scopus[52].

Looking at the local and online landscape, I group publications (intended as web sites, blogs, and podcasts about my work) into publications about my research activities, technology transfer activities, and public engagement activities. The latter two are so called *Third mission* activities, I use the third mission definition of the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)[53].

Publications about my research activities

– JAXenter.de (16.11.12): *Zwischen Cowboy-Codern und Agile-Gurus: Willkommen zum 'Dark Manifesto for Agile Software Development'*[54]
– svenpet.com (21.11.12): *Beyond Scrum – Is Agile dead?*[55]
– zukunftsarchitekten-podcast.de (27.8.13): *ZA061 – Scrummerfall – Wenn SCRUM scheitert*[56]
– Research Institute for Symbolic Computation at the Johannes Kepler Universität Linz (28.8.15): *Landeskorrespondenz Nr. 165 vom 28. August 2015*[57]
– academia.bz.it (11.1.16): *Bugbuster. Ovvero il liquidatore di bachi informatici*[58]
– Südtiroler Wirtschaftszeitung (20.5.16): *Weg von der Bananensoftware*[59]
– eventil.com (6.8.19): *XTC: Dark Agile*[60]
– noi.bz.it (16.11.18): *The REUSE initiative*[61]
– noi.bz.it (16.11.18): *Elixir, the hipster programming language*[62]
– holdreich.net (15.12.18): *Join the dark side, we have a Dark Agile Manifesto*[63]
– noi.bz.it (15.11.19): *Raising the Developer Awareness of Critical Code*[64]
– noi.bz.it (15.11.19): *Personas-Driven Approach to Test Case Generation*[65]

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[51] https://scholar.google.com/citations?user=8lYoEEQAAAAJ
[52] https://www.scopus.com/authid/detail.uri?authorId=7003421075
[53] https://www.anvur.it/wp-content/uploads/2018/11/SUA-TM_Lineeguida.pdf.
[54] https://jaxenter.de/zwischen-cowboy-codern-und-agile-gurus-willkommen-zum-quotdark-manifesto-for-agile-sof tware-developmentquot-4176
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[56] https://zukunftsarchitekten-podcast.de/2013/08/za061-scrummerfall-wenn-scrum-scheitert/
[57] https://risc.jku.at/wp-content/uploads/2018/05/kompatscher.pdf
[58] https://issuu.com/unibz/docs/a72_1/2
[59] https://swz.it/weg-von-der-bananen-software/
[60] https://eventil.com/events/xtc-topic-tbd-be87becb-8d24-49a0-8928-06992b9fed0d
[61] https://www.sfscon.it/talks/the-reuse-initiative/
[62] https://www.sfscon.it/talks/elixir-the-hipster-programming-language/
[63] http://www.holdreich.net/join-the-dark-side-we-have-a-dark-agile-manifesto
[64] https://www.sfscon.it/talks/raising-the-developer-awareness-of-critical-code/
[65] https://www.sfscon.it/talks/personas-driven-approach-to-test-case-generation/

- noi.bz.it (16.11.19): *API Fluency: remembering APIs to become more effective*[66]
- noi.bz.it (13.11.20): *One year with Pepper*[67]
- noi.bz.it (12.11.20): *IoT in climbing: Non-invasive activity tracking*[68]
- infoq.com (30.7.21): *Cliff Berg and Raj Nagappan on Agile 2: the Next Iteration of Agile*[69]
- noi.bz.it (12.11.21): *Climbing route clustering using energy efficient sensors*[70]
- noi.bz.it (12.11.21): *Tracking climbers using stereo cameras*[71]
- noi.bz.it (13.11.21): *Continuous Performance Testing using locust.io (and a call for data)*[72]
- content.intland.com (25.1.22): *Dark Agile Manifesto: Criticism of Agile Development*[73]
- inforte.fi (7.7.22): *Promote your research in Industry and Academia*[74]
- talkbystudents.turkuamk.fi (29.8.22): *Problems in Quality and Productivity of Agile Software Development in Theory and Practice: How to Overcome Them*[75]
- noi.bz.it (11.11.22): *Scalability assessment applied to microservice architectures*[76]
- noi.bz.it (12.11.22): *Industry-academia collaborations: experiences and pitfalls*[77]
- fhv.at (11.12.23): *Announcement about PROFES 2023 at the FHV Vorarlberg University of Applied Sciences*[78]

Publications about technology transfer activities (Third mission)

- academia.bz.it (19.12.17): *Die Techies kommen! Attenti a quei nerd! The Rise of the Techies!*[79]
- idw-online.de (11.5.20): *Gesundheitsüberwachung von Covid-19-Patienten: Applikation reCOVeryaID der unibz könnte Krankenhäuser entlasten*[80]
- Dolomiten (26.5.20): *Handy-App gegen Infektionsherde*
- unibz.it (5.11.20): *Monitorare la salute dei pazienti Covid-19 a casa? Si può con reCOVeryaID*[81]
- noi.bz.it (5.11.20): *Covid-19: neue App zur Entlastung von Ärzten und Krankenhäusern*[82]

[66] https://www.sfscon.it/talks/api-fluency/
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[69] https://www.infoq.com/podcasts/agile-next-iteration/
[70] https://www.sfscon.it/talks/climbing-route-clustering-using-energy-efficient-sensors/
[71] https://www.sfscon.it/talks/tracking-climbers-using-stereo-cameras/
[72] https://www.sfscon.it/talks/continuous-performance-testing-using-locust-io-and-a-call-for-data/
[73] https://content.intland.com/blog/agile/dark-agile-manifesto-anti-agile-manifesto-criticism-of-agile
[74] http://inforte.jyu.fi/events/promote-your-research-in-industry-and-academia
[75] https://talkbystudents.turkuamk.fi/master-school/problems-in-quality-and-productivity-of-agile-software-development-in-theory-and-practice-how-to-overcome-them/
[76] https://www.sfscon.it/talks/scalability-assessment-applied-to-microservice-architectures/
[77] https://www.sfscon.it/talks/industry-academia-collaborations-experiences-and-pitfalls/
[78] https://www.fhv.at/event/profes-2023-16633
[79] https://issuu.com/unibz/docs/academia-77
[80] https://idw-online.de/en/news757273
[81] https://www.unibz.it/de/news/136722-gesundheitsueberwachung-von-covid-19-patienten-mit-der-applikation-recoveryaid
[82] https://noi.bz.it/de/artikel/covid-19-neue-app-zur-entlastung-von-aerzten-und-krankenhaeusern

- Il Fatto Nisseno (5.11.20): *Covid, reCOVeryaID: l'app per monitorare i pazienti a casa*[83]
- BitMAT (5.11.20): *Monitorare la salute dei pazienti Covid-19? Non serve l'ospedale se c'è reCOVeryaID*[84]
- insalutenews.it (5.11.20): *Come monitorare la salute dei pazienti Covid. Ecco la app che controlla da remoto il decorso dell'infezione*[85]
- Vanity Fair (6.11.20): *Telemedicina, ecco la piattaforma per aiutare i medici di base ai tempi del Covid*[86]
- unibz.it (9.11.20): *COVID-19: Applikation reCOVeryaID könnte Krankenhäuser entlasten*[87]
- Impresa Sanità (10.11.20): *Assistenza Medica da remoto con reCOVeryaID*[88]
- INNOS (3.12.20): *Datenmanagement mit Microservices*[89]
- Südtirol Panorama (7.7.21): *reCOVeryaID – Digitales Gesundheitstool*

Publications about public engagement activities (Third mission)

- blikk.it (6.5.12): *Roboter 1A und 1B*[90]
- unibz.it (15.5.13): *JuniorUni – willkommen in der Welt der Forschung*[91]
- Dolomiten (16.5.13): *JuniorUni: Tür auf für kleine Forscher*[92]
- unibz.it (27.9.13): *Tag zwei des Innovation Festivals*[93]
- unibz.it (27.3.15): *Was macht die Kuh den ganzen Tag?*[94]
- unibz.it (25.3.16): *Mit der JuniorUni am Bauernhof*[95]
- unibz.it (14.2.17): *Coding to win the Google Contest*[96]
- unibz.it (26.2.18): *Google Hash Code 2018: our students code to win*[97]
- unibz.it (13.4.18): *JuniorUni am NOI Techpark: wie funktionieren Roboter?*[98]
- stol.it (26.2.19): *Südtirols IT-Profis tüfteln für Google*[99]
- unibz.it (19.6.19): *Hands-on demo of the robot Pepper*[100]
- noi.bz.it (15.11.19): *Pepper, a robot to welcome guests at the NOI Techpark*[101]

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[87] https://www.unibz.it/de/news/136731-covid-19-applikation-recoveryaid-koennte-krankenhaeuser-entlasten
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[89] https://www.innos.at/webinar-datenbanken-und-deren-effiziente-verwendung/
[90] https://www.blikk.it/forum/blog.php?bn=rp_msmartin&lab=1328906890&id=1336308986
[91] https://www.unibz.it/de/news/76408-junioruni-willkommen-in-der-welt-der-forschung
[92] https://www.sciencesouthtyrol.net/blob/76427,,,UNIBZ,1,-1.pdf
[93] https://www.unibz.it/de/news/78284-tag-zwei-des-innovation-festivals
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[95] https://www.unibz.it/de/news/116896-mit-der-junioruni-am-bauernhof
[96] https://www.unibz.it/de/news/121756-coding-to-win-the-google-contest
[97] https://www.unibz.it/de/news/127641-google-hash-code-2018-our-students-code-to-win
[98] https://www.unibz.it/de/news/128124-junioruni-am-noi-techpark-wie-funktionieren-roboter
[99] https://www.stol.it/Artikel/Wirtschaft/Lokal/Suedtirols-IT-Profis-tuefteln-fuer-Google
[100] https://www.unibz.it/it/events/132239-hands-on-demo-of-the-robot-pepper
[101] https://www.sfscon.it/talks/pepper-a-robot-to-welcome-guests-at-the-noi-techpark/

- noi.bz.it (29.10.20): *Hallo, ich bin Pepper: Der freundliche Roboter im NOI Techpark*[102]
- tageszeitung.it (15.11.22): *Die Siegerprojekte*[103]

Further data

This section, illustrates the presentations at scientific conferences over past 3 years, summarizes my participation to research projects, lists invited talks at organizations or non-scientific events, and the participation to training events.

Presentations at scientific conferences over the past 3 years (conference papers)

- 2021, April 19–23: *A Multivariate Characterization and Detection of Software Performance Antipatterns* [Conference paper, selected]. ACM/SPEC International Conference on Performance Engineering (ICPE), Virtual. https://doi.org/10.1145/3427921.3450246
- 2021, March 22–26: *PPTAM$^\lambda$: What, Where, and How of Cross-domain Scalability Assessment* [Conference paper, selected]. 18th International Conference on Software Architecture (ICSA), Stuttgart, Germany. https://doi.org/10.1109/ICSA-C52384.2021.00016
- 2022, August 22–24: *Introducing Data Science Techniques into a Company Producing Electrical Appliances* [Workshop paper, selected]. 33rd International Conference on Database and Expert Systems Applications Workshops (DEXA), Vienna, Austria. https://doi.org/10.1007/978-3-031-14343-4_20
- 2022, May 21–22: *Microservices Integrated Performance and Reliability Testing* [Conference paper, selected]. IEEE/ACM International Conference on Automation of Software Test (AST), Pittsburgh, PA, USA. https://doi.org/10.1145/3524481.3527233
- 2022, August 22–24: *A Technology Transfer Portal to Promote Industry-Academia Collaboration in South-Tyrol* [Workshop paper, selected]. 33rd International Conference on Database and Expert Systems Applications Workshops (DEXA), Vienna, Austria. https://doi.org/10.1007/978-3-031-14343-4_21
- 2022, October 02-07: *CATTO: Just-in-time Test Case Selection and Execution* [Tool demonstration, selected]. 38th IEEE International Conference on Software Maintenance and Evolution (ICSME), Limassol, Cyprus. https://doi.org/10.1109/ICSME55016.2022.00059
- 2022, October 31 – November 3: *Automated Dependability Assessment in DevOps Environments* [Workshop paper, selected]. IEEE International Symposium on Software Reliability Engineering Workshops (ISSREW), Charlotte, North Carolina, USA. https://doi.org/10.1109/ISSREW55968.2022.00046
- 2023, September 19–23: *Continuous Dependability Assessment of Microservice Systems* [Conference (tutorial) paper, selected]. 16th European Conference on Software Architecture (ECSA), Prague, Czech Republic. https://doi.org/10.1007/978-3-031-36889-9_11

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[102] https://noi.bz.it/de/magazine-innovazione/pepper-humanoider-roboter-kÃ¼nstliche-intelligenz
[103] https://www.tageszeitung.it/2022/11/15/die-siegerprojekte-2/

- 2023, September 18–22: *Architecture Risk Assessment in an Industrial Agile Environment* [Conference paper, selected]. 17th European Conference on Software Architecture (ECSA), Istanbul, Turkey.
- 2023, October 9–12: *Assessment of Aging and Rejuvenation for Resiliency in Heterogeneous Network Clusters* [Workshop paper, selected]. IEEE International Symposium on Software Reliability Engineering Workshops (ISSREW), Florence, Italy.
- 2024, April 14–20: *Understanding the Causes of Microservice Logical Coupling: an Exploratory Study* [Workshop paper, selected]. 1st International Workshop New Trends in Software Architecture (co-located with the 46th International Conference on Software Engineering) (SATrends), Lisbon, Portugal. https://conf.researchr.org/home/icse-2024/satrends-2024

Presentations at scientific conferences over the past 3 years (keynotes, tutorials, or journal first presentations)

- Andrea Janes, Dainius Jocas, Giancarlo Succi, & Alberto Sillitti (2013, October 26–31). *Diving into Dalvik* [Tutorial]. International Conference on Systems, Programming, Languages and Applications: Software for Humanity (SPLASH), Indianapolis, IN, USA. https://2013.splashcon.org/track/splash-2013-Tutorials
- Marina Andric, Iustina Ivanova, Francesco Ricci and Andrea Janes (2021, September 13–17). *Predicting the Perceived Difficulty Grades of Climbing Routes* [Presentation at the Industry Track]. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD), Virtual. https://2021.ecmlpkdd.org/index.html@p=2243.html
- Alberto Avritzer, Barbara Russo, Catia Trubiani, Matteo Camilli, André van Hoorn & Andrea Janes (2021, October 25–28). *Continuous Dependability Assessment and Improvement in DevOps* [Tutorial]. 32nd International Symposium on Software Reliability Engineering (ISSRE), Wuhan, China. https://2020.issre.net/tutorials.html
- Alberto Avritzer, Barbara Russo, Catia Trubiani, Matteo Camilli, André van Hoorn, & Andrea Janes (2022, March 12–15). *Continuous Architecture Deployment Assessment and Improvement in DevOps* [Presentation at the Architecture in Practice Track]. 19th International Conference on Software Architecture (ICSA), Hawaii, USA. https://doi.org/10.1109/ICSA-C54293.2022.00007
- Alberto Avritzer, Barbara Russo, Matteo Camilli, Andrea Janes, André van Hoorn, & Catia Trubiani (2022, September 19–23). *Verification and Validation of Microservice Systems* [Tutorial]. 16th European Conference on Software Architecture (ECSA), Prague, Czech Republic. https://conf.researchr.org/details/ecsa-2022/ecsa-2022-workshops-tutorials/3/Verification-and-Validation-of-Microservice-Systems
- Matteo Camilli, Andrea Janes, & Barbara Russo (2023, March 13–17). *Automated test-based learning and verification of performance models for microservices systems* [Journal first presentation]. 20th IEEE International Conference on Software Architecture (ICSA), L'Aquila, Italy. https://doi.org/10.1016/j.jss.2022.111225

- Andrea Janes (2023, July 12). *Automated performance monitoring and regression testing* [Invited talk]. 21. Anwenderkonferenz zu Softwarequalität, Test und Innovation (ASQT), Bozen, Italy. https://asqt.cicero-software.com/tagungsprogramm/
- Andrea Janes (2023, October 10–12). *Microservice performance engineering* [Keynote]. 5th International Conference on Microservices (MICROSERVICES), Pisa, Itay. https://www.conf-micro.services/2023/keynotes

Participation to research projects

In addition to the research projects in which I was Principal Investigator and Co-Principal Investigator (see "Research grants" above), I contributed as an Investigator to the following research projects:

Date/s	Funding body	Title
1.6.02–31.10.03	EU[104] (FP5)	Network for Agile Methodologies Experience (NAME)
1.11.02–31.5.07	MIUR[105] (FIRB)	Metodologie Agili per la Produzione del Software (MAPS)
1.11.03–31.10.07	EU (Interreg)	Software District (SWD)
1.1.04–30.6.06	EU (FP6)	Consortium for studying, evaluating, and supporting the introduction of Open Source software and Open Data Standards in the Public Administration (COSPA)
1.10.05–30.4.07	unibz	Experimentation of Agile Practices in concrete development Infrastructures (ASPRE)
1.10.06–31.3.08	unibz	Experimental Study of the Software Development Environment (ESSDE)
1.3.08–30.9.10	EU (FP7)	NESSI Open Framework – Reference Architecture (NEXOF-RA)
1.12.08–30.6.10	unibz	IT needs of SMES (ITSME)
1.10.09–31.3.11	unibz	Software Process Improvement for SMEs (SPISME)
1.6.10–31.10.11	unibz	Open Source processes for SMEs (OSP)
1.7.10–31.12.11	unibz	Web Service Certification (WSC)
1.7.10–31.12.11	unibz	Software Development support with Open Source tools (SDOS)
1.7.12–31.7.13	unibz	Quality In Open Source Software (QOSS)
1.8.12–31.8.14	Autonomous Province of Bozen-Bolzano, Italy	Automazione della QUAlità della produzione Software (AQUAS)
1.9.12–30.4.15	EU (Interreg)	Energy aware computing (EN-ACT)
1.7.13–30.6.14	unibz	QUAlity of Mobile apps (QUAM)
1.9.13–31.5.15	Euregio Mobility Fund[106]	Summer of IT Entrepreneurship (SITE)
1.9.13–31.3.15	Euregio Mobility Fund	Teaching Computational thinking in high schools (TACITUS)
1.9.13–31.8.15	unibz	Optimization of the execution of self-adaptive, self-healing, and self-recovery software applications for energy saving
1.6.14–31.5.15	unibz	FUnctional and Non- functional properties of Virtual Machines (FUN-VM)
1.9.15–28.2.17	unibz	Mining Users' Reviews to Support the Release Planning of Mobile Apps (RPMA)

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[104] European Union
[105] Ministero dell'istruzione, dell'università e della ricerca, in English: *Ministry of education, university and research*
[106] http://www.europaregion.info/it/euregio-mobilitaetsfonds.asp

Date/s	Funding body	Title
1.10.18–30.9.21	unibz	Software Architecture Recommendation system built on DEsign Change History (SARDECH)
1.2.20–28.2.22	Ulla Tuominen Foundation	Software Rejuvenation (SORE)
1.3.22–28.2.26	FFG[107]	Plattform für technikgestützte Pflege und Betreuung von zu Hause lebenden Menschen mit Demenz (TeleCareHub)

Invited talks at non-scientific events

Date/s	Venue	Title
3.3.06	IT Security Day, Bolzano, Italy	Best Practices der sicheren Programmierung mit .NET
19.6.09	University of Madrid, Spain	Research topics of the Software Engineering research group at the Faculty of Computer Science and the European Master on Software Engineering in Bolzano (Italy), Madrid (Spain) and Oulu (Finland)
21.11.12	IT & Business Forum, Bolzano, Italy	Intelligente mobilität: Touch design in mobile applications
16–21.6.13	EURAC Junior Science Camp, Radein, Italy	Tutorial on the construction and programming of a Lego Mindstorm Robot together with 20 high school students
8.4.13	Wirtschaftsfachoberschule Franz Kafka, Meran, Italy	Software Projektmanagement Highlights
8.7.13	CASE Summer School, Bolzano, Italy	Lean Software Engineering
1.4.14	OBJEKTspektrum Information Days, Stuttgart, Germany	Dark Agile Manifesto: Auf die Ergebnisse kommt es an
2.4.14	OBJEKTspektrum Information Days, Darmstadt, Germany	Dark Agile Manifesto: Auf die Ergebnisse kommt es an
3.4.14	OBJEKTspektrum Information Days, Köln, Germany	Dark Agile Manifesto: Auf die Ergebnisse kommt es an
17.2.15	Blekinge Institute of Technology, Blekinge, Sweden	Non-invasive Software Analytics
21.11.17	Software Craftsmanship South Tyrol, Bolzano, Italy	Elixir, the hipster language (together with Philip Giuliani and Daniel Morandini)
18.9.18	Tampere University of Technology, Tampere, Finland	Non-distracting, Continuous Collection of Software Development Process Data
9.11.18	Wirtschaftsfachoberschule Franz Kafka, Meran, Italy	The faculty of Computer Science of the Free University of Bozen-Bolzano about study opportunities in the area of computer science in Bolzano
16–17.11.18	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	The REUSE Initiative
16–17.11.18	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Elixir, the hipster language
10.12.18	Ski Safety Innovation Summit, Val Gardena, Italy	Data, algorithms and models for estimating the risk of injury in ski resorts

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[107] Österreichische Forschungsförderungsgesellschaft

Date/s	Venue	Title
6.7.19	ASTAT, Bolzano, Italy	Table and Graph Design (together with Ilenia Fronza)
15–16.11.19	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	API fluency
15–16.11.19	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Raising the Developer Awareness of Critical Code (together with Michael Mairegger)
15–16.11.19	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Pepper, a robot to welcome guests at the NOI technology park (together with François Tronche-Macaire)
15–16.11.19	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Personas-Driven Approach to Test Case Generation (together with Riccardo Felluga)
12.12.19	Software Developers' Thursday at the NOI Technology Park, Bolzano, Italy	Licensing with REUSE (together with Peter Moser)
14.11.20	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	One year with Pepper (together with Johannes Brunner)
26.10.20	Wirtschaftsfachoberschule Franz Kafka, Meran, Italy	Zukunftschancen mit Wirtschaftsinformatik (future opportunities with business informatics)
1.4.21	Software Developers' Thursday at the NOI Technology Park, Bolzano, Italy	locust – the Open Source Load Testing Tool
12.11.21	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Continuous Performance Testing using locust.io
23.11.21	NOI Techpark, Italy	Tecnologie ICT per il monitoraggio ed il coordinamento dei movimenti umani (together with David Massimo)
16.6.22	Tampere University of Technology, Tampere, Finland	Scalability Assessment applied to Microservice Architectures
5–8.9.22	Tampere University, Tampere, Finland	Technology transfer and applied research in companies: pearls and pitfalls
18.10.22	Wirtschaftsfachoberschule Franz Kafka, Meran, Italy	Zukunftsperspektiven für Wirtschaftsinformatiker
11.11.22	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Scalability assessment applied to microservice architectures
12.11.22	South Tyrolean Free Software Conference (SFSCon), Bolzano, Italy	Industry-academia collaborations: experiences and pitfalls

Software I developed

Type	Description
Measurement tools	Various measurement tools to automatically identify the interactions of developers and users when interacting with Microsoft Windows, Microsoft Visual Studio/Code, MacOS, Eclipse, and Microsoft Office.

Type	Description
Infrastructure tools	All necessary software to use software metrics to drive decisions within software development teams, including tools for deployment, data collection, analysis, and visualization of the collected data.
Data visualization	An innovative dashboard, based on pre-attentive processing and the GQM+Strategy model to visualize the collected measurements in a goal-oriented way.
Robotics	I developed the main application as well as around 30 apps for Pepper, the robot welcoming visitors at the NOI Technology Park.
IDE extensions	A set of plug-ins to extend Integrated Development Environments to provide feedback to developers directly in the tool in which they are working.
Web site of the Smart Data Factory	It might not be the most beautiful one, but the creation of https://smart.inf.unibz.it required the collection of the skills offered by the Faculty of Computer Science of unibz, the elicitation of collaboration opportunities, and the definition of a collaboration process with companies. Moreover, to allow local companies to better understand the available services, descriptions are formulated in Italian, German, and English.
Scalability assessment	A set of tools to conduct, manage, and visualize performance evaluation of software architectures. This is an ongoing research project available on https://github.com/pptam/pptam-tool.
Simulation	A set of tools to simulate the deployment of large-scale microservice-based software systems.

Participation to training events

Date/s	Description	Organizer
28.9.15	Catherine Toomey: English as a medium of instruction. *Academic Teaching Excellence (ATE) training course.*	British Council
27.9.21	Laura Levaggi, Heidrun Demo, Nadia Vicari: Inclusive Teaching: Introduction and case studies. *Academic training.*	unibz
28.9.21	Paolo Mazzucato: Media proficiency in video and radio: a toolbox. *Academic training.*	unibz
26.5.22	Antonio Di Pasquale: Corso di aggiornamento per preposti[108]. *Online training.*	unibz
31.10.22	Liisa Postareff, Viivi Virtanen, Telle Hailikari: Constructive Alignment and Assessment. *Online RUN-EU Future and Advanced Skills Academy Workshop.*	run-eu.eu
2.11.22	Johan Postema, Tanja Eiselen, Frank Weber, Annette Nußbaumer-Martinovic: Future skills needed by the students. *Online Future and Advanced Skills Academy Workshop.*	run-eu.eu
17.11.22	Nikolaus Forgó: DSGVO Schulung für Forschungs- und Bildungseinrichtungen[109]. *Online training.*	Vienna University
29.11.22	Margarethe Hochleitner: Gender Medicine/Diversitas—What is it and why do we need it?. *Lecture series LGBTIQ* in the context of our time.*	fhv
8.12.22	Helen Chadda, Telle Hailikari: Supporting teachers' and students' wellbeing. *Online Future and Advanced Skills Academy Workshop.*	run-eu.eu

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[108] In English: *Workplace safety training*
[109] In English: *GDPR training for research and educational institutions*

Date/s	Description	Organizer
10.1.23	Oskar Müller and Heidrun Schöch: Einführung in die Evaluation der Lehre[110]. *Online training*.	fhv
19.1.23	Edna Fitz: Data protection training: current topics and updates. *Online training*.	fhv
1.2.23	Babette Hebenstreit, Angelika Kaufmann-Pauger: Appreciative learning and teaching atmosphere. *Teaching Excellence and Lifelong Learning (TELL) Center Workshop*.	fhv
2.2.23	Christina Hollosi-Boiger: Betreuung und Begleitung studentischer Abschlussarbeiten im Fachbereich Technik[111]. *Subject-specific advanced training module*.	fhv
22.2.23	Tania Marsh, João Vilaça: ORCID iDs & Persistent Identifiers in Research. *Online Workshop*.	run-eu.eu
28.2.23	Kazuma Matoba, Fabian A. Rebitzer: Heteronormativity and queer thinking. *Lecture series LGBTIQ* in the context of our time*.	fhv
14-15.3.23	Mag.ª Roswitha Mayr: Hochschuldidaktik I[112]: formulate learning outcomes for courses, plan courses with the help of a learning psychology model, promote and organize students' active learning activities, develop a personal method portfolio, work with elements of self-directed learning, reduce and structure content in the face of short attendance times.. *Online Training*.	Austrian Association of Universities of Applied Sciences
21.3.23	Willy Christian Kriz: Kompetenzorientiertes Prüfen[113]. *Teaching Excellence and Lifelong Learning (TELL) Center Workshop*.	fhv
4.4.23	Fabian Andreas Rebitzer: Diversitätsschulung[114]. *Training*.	fhv
28– 29.11.23	Mag.ª Roswitha Mayr: Hochschuldidaktik II[115]: Realistically assess the effect of appearance when teaching, using an extended repertoire of elements to organize and loosen up teaching, tools for block courses and large groups work with media to promote learning, practicing a good balance between teaching and learning.. *Training*.	Austrian Association of Universities of Applied Sciences
19.12.23	Edna Fitz, FHV Information Services, Teaching Excellence and Lifelong Learning: Richtiger Umgang mit Phishing-Mails[116]. *Online training*.	fhv

Entrepreneurship

I am co-author of the patent "Nokia Corporation, Saarinen J., Kärkkäinen L., Terho M., Fronza I., Janes A., Sillitti A., Succi G.: 'A system and a method for determining context.'", publication number: WO/2013/124521, international application number: PCT/FI2012/ 050180, 2013[117].

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[110] In English: *Introduction to the evaluation of teaching*
[111] In English: *Supervision and support of student theses in the field of technology*
[112] In English: *University didactics 1*
[113] In English: *Competence oriented examination*
[114] In English: *Diversity training*
[115] In English: *University didactics 2*
[116] In English: Correct handling of phishing emails
[117] https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2013124521

Websites about me	– Google Scholar: https://scholar.google.com/citations?user=8lYoEEQAAAAJ
	– DPLB: https://dblp.org/pid/04/2902
	– Scopus: https://www.scopus.com/authid/detail.uri?authorId=7003421075
	– ORCID: https://orcid.org/0000-0002-1423-6773
	– LinkedIn: https://www.linkedin.com/in/ajanes/
	– Researchr: https://conf.researchr.org/profile/andreajanes
	– Personal website: https://ajanes.github.io

Language competences

- German: First language. I passed the language examination "A" of the province in Bolzano, which certifies that I am proficient in German at the level C1 of the Common European Reference Framework[118]. I self-assess my skills in German as C2. I also speak Bavarian (ISO 639-3 code "bav"), which allows me to interact easily with research partners, companies, and students in South Tyrol, Austria, parts of Switzerland, and Germany.
- Italian: I passed the language examination "A" of the province in Bolzano which certifies that I am proficient in Italian at the level C1 of the Common European Reference Framework. I self-assess my Italian skills as C2.
- English: I passed the exam Cambridge Certificate of Advanced English (corresponds to level C1), issued 23.8.11, certificate number 00323506-72. Moreover, I passed the English Language Exam C1 of the Language Center of unibz on the 27.02.18. I self-assess my skills in English as C1.

I authorize the processing of my personal data in the curriculum vitae in accordance with Legislative Decree No. 196 of June 30, 2003 and the GDPR (EU Regulation 2016/679).

Bolzano, **February 27, 2024**

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[118] https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045bb52