

## Prof. Dr. Claus Pahl

Faculty of Computer Science  
Free University of Bozen-Bolzano  
39100 Bolzano, ITALY

[claus.pahl@unibz.it](mailto:claus.pahl@unibz.it) - <http://www.inf.unibz.it/~cpahl/> - +39 0471 016 177

May 2021

### Current Position

- Full Professor of Software Engineering
- Dean of the Faculty of Computer Science, Free University of Bozen-Bolzano

### Recent Academic Management Positions

- Vice-Dean for Research, Faculty of Computer Science (2019 – 2020)
- Coordinator of the PhD Programme in Computer Science (2017-2020)
- Head of the Software and Systems Research Centre (2017-2020)

### Achievements

- Listed among the 1.1% top scientists in a recent study by the University of Stanford<sup>1</sup>.
- Listed top 100 of all academics in the areas Computing and Electronics in Italy<sup>2</sup>.
- Published more than 350 papers.
- Obtained an *h-index* of 48 (according to Google Scholar, May 2021), more than 7300 citations.
- Attracted more than 5.5 million Euros in external research funding from national, international and industry sources.
- Received an *Innovation Award* from the INVENT centre for SME engagement.
- Received 5 best paper awards/nominations (Cloud & Grid Comp, CCGrid, CloudWays, LODE, IIAS).

### Research and Management Positions

- Lead Principal Investigator (IC4) with specific responsibility for the architecture theme, he helped building the national *Irish Centre for Cloud Computing and Commerce IC4* – a technology centre consisting of 3 universities working with more than 40 industry partners.
- Executive Board Member (Lero) of the *Lero Software Research Centre* with more than 200 researchers across 7 universities – coordinator of the Lero activities at Dublin City University.
- Funded Investigator (ADAPT) at the *Centre for Digital Content Technologies ADAPT* (and its former incarnation CNGL).
- Director (CloudCORE) of the *Cloud Computing Research Centre CloudCORE* at Dublin City University.

### Research Areas

- Software engineering, focusing on modern software architecture and quality management.
- Service engineering and edge/cloud architectures have served as a specific application context for his software architecture research – looking into migration, self-adaptive architectures, dynamic dependability and performance engineering in this context.
  - o *Model-driven Software Construction and Management* (graph theory, Markov models, fuzzy logic, control theory)
  - o *Performance and Dependability in Software Quality Management* in self-adaptive distributed edge and cloud architectures
  - o *Simulation Techniques and Tools* for network and edge-oriented architectures
  - o *Machine Learning-driven Software Construction* – engineering principles and quality control specifically in edge and IoT architectures

---

<sup>1</sup> <https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918>

<sup>2</sup> <https://www.guide2research.com/scientists/IT>

- He also worked on research aspects in *educational technologies*, aiming to bring research expertise into the educational side of academia.
- Currently, he works on the EU H2020 project 5G-CARMEN, where he investigates performance engineering aspects for edge cloud architectures with *Cooperative, Connected and Automated Mobility (CCAM)* as the application context.

### **Degrees and Past Employment**

- Claus Pahl received an *undergraduate degree in Computer Science* from the Technical University of Braunschweig in Germany in 1990.
- Between 1991 and 1996 he was employed as a researcher at the Universities of Essen and Dortmund.
- Awarded a *Ph.D. in Computer Science* on the topic of formal specification languages in 1996 from the University of Dortmund.
- Held *academic positions* at Dublin City University, University College Cork, Trinity College Dublin and the Technical University of Denmark, before taking up his position in Bolzano.
- *Visiting researcher* and *guest professor* at universities in Oldenburg (Germany), Edinburgh (UK) and Shenyang (China).
- *Senior Lecturer* at Dublin City University where he held tenured positions from 1999 to 2016.

### **Reviewing and Evaluation**

- Served on 7 *journal editorial boards* in software engineering and educational technology over time.
- Participated in the *conference organisation* of more than 200 events.
- Reviewed for more than 35 journals.
- *Evaluator* for research and innovation 14 projects across 9 countries across Europe, North America and Asia.
- *Expert reviewer* for 5 EU FP7 and H2020 projects for more than a decade.

### **Invited Speaker**

- *Invited speaker* and *panellist* at events such as CLOSER, NC4, SE-CLOUD, SAGRA, WEBIST, ESOC, Intelligent Cloud Summit and HEANet (11 conferences, 6 panels, 24 seminar presentations).

### **Teaching and Administration**

- Has been teaching *software engineering, programming languages and database technologies* across Bachelor and Master degree programs – to both computing students and students with interdisciplinary backgrounds.
- *Coordinated several Master degree programmes* – helped to accredited and served as first chairperson of a Master in Software Engineering at Dublin City University.
- Served on many university management committees on research, teaching and technical work programmes.
- Received the DCU *Teaching and Learning Fellowship award*.

### **Supervision and Examination**

- *Supervised* 12 PhD Students and 3 MSc by Research (2-year research program) to completion. 4 PhD students ongoing.
- *Examined* 24 research theses in Ireland, United Kingdom, the Netherlands, Italy, Australia and Austria.