

Curriculum Vitae: Jaccheri, Letizia

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Date of birth: 24th February 1965

Nationality: Norwegian

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Education

1994: PhD, Software Engineering, Politecnico di Torino, Italy

1988: Laurea (a joint MSc and BSc), Computer Science, Università di Pisa, Italy

Current and previous Position

2002-now Professor, Department of Computer Science, NTNU, Norway

2019-2023 Adjunct Professor, Department of Computer Science - UiT Tromsø - Norway

2017-2021 Board member, Faculty of Information Technology and Elect. Engineering, NTNU

2020-2022 Board member, Informatics Europe

2013-2017 Department Head, Department of Computer Science, NTNU, Trondheim, Norway

2015-2018 Member of the Board of Directors, Reply SPA, Italy (15.000 employees worldwide)

2007-2009 Adjunct Professor, Department of Informatics, University of Oslo, Norway

1997-2002 Associate Professor, Department of Computer Science, NTNU, Norway

1993-1997 Researcher, Politecnico di Torino, Italy

1988-1990 Software engineer, Teciel SPA Pisa, Italy

Fellowships and awards

2023 Best Paper Award, 16th International Conference on ICT, Society and Human Beings

2022 Best paper award, 15th International Conference on ICT, Society and Human Beings

2022 Best paper award, International Conference on Sustainability in Software Engineering

2018 Honorable Mention Note, ACM IDC

2021 Gender Equality Award, NTNU

2021 ODA Award for Norway's leading female role model for gender equality in tech

2019 Organiser of Conference of the year, Trondheim Municipality.

2016 Best workshop award IEEE International Technology Management Conference.

2006 Communicator of the year, NTNU faculty.

Supervision of graduate students and postdoctoral fellows

1997-2023: (NTNU) 11 PostDocs, 14 PhDs of which 4 active now, 100+ MSc

1993-1997: Politecnico di Torino 2 PhD, 5 MSc (I started to supervise two PhD students, now renowned software engineering professors Patricia Lago and Gianpietro Picco) as soon as I finished my PhD in the early 90's.

Organization of scientific meetings

2023 ACM WomENCourage, General Chair;

2023 LEARNER 2023 Workshop, with EASE Conference, Organizer

2023 Workshop on Gender Equity, Diversity, and Inclusion in Software Engineering, Co-chair

2022 Workshop on Gender Equity, Diversity, and Inclusion in Software Engineering, Co-chair

2020 Evaluation and Assessment in Software Engineering (EASE), General Chair;

2019 IFIP Conference on e-Business, e-Services and e-Society, Co-chair;

2018 ACM Interaction Design and Children Conference, Co-chair;

2018 European Computer Science Summit Informatics Europe, Co-chair;

2016 Leadership Workshop, IEEE International Technology Management Conference, Chair

2015 IFIP International Conference on Entertainment Computing, General Chair.

Invited Keynote speaker

2023 International Conf. on Enterprise Information Systems (ICEIS)

2022 Mediterranean Conference on Embedded Computing (MECO'2022)

2022 ACM conference on Innovation and Technology in Computer Science Education (ITiCSE)

2021 Norwegian ICT conference for research and education (NIKT)

2020 International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)

2020 International Conference on the Quality of Information and Communications Technology (QUATIC)

Research Expeditions

Brazil 2023 Leader of research expedition to Federal University of Amazonas with a group of 10 graduated students.

China 2019 Leader of research expedition to Nanjing University and Tsinghua University, and companies Huawei Nanjing R&D Center, Legend, Face++, and Tecent, with a group of 65 students and four scientific personnel.

USA 2019 Leader of research expedition to University of Michigan with a group of 20 scientific personnel.

Editorship

2014-2023 Associated editor of Elsevier Entertainment Computing Journal;

2020-now Associated editor of Elsevier Computer Science Review;

2015-now PC member of ICSE conference (society and/or education track);

2024 editor of special issue JSS.

Institutional responsibilities

2013-2017 Department head of the Computer Science department with a max of 250 employees, 2500 students, yearly budget of 30 MEuro and several International and National research projects.

2010-2013 Group leader of the Software Engineering Group

Reviewing and advisory activities

2024 Scientific Advisory Board of one FNR Luxembourg PEARL scheme;

2023 Scientific Advisory Board for Horizon Project STE(A)M Learning Ecologies

2023 IEEE Distinguished Education Award (leader of the committee);

2023 COST Action evaluator;

2023 Università di Pisa professorship evaluation;

2021 CYQAA Cyprus Agency of University Accreditation, accreditation, leader of the committee;

2020 Lappeenranta-Lahti University of Technology professor evaluation;

2020 ERA PerMed (Personalised Medicine) - project proposals Evaluation;

2020 Imec.icon Belgium - proposals evaluation

2018 Politecnico di Torino - professorship evaluation;

2016 University of Vienna - professorship evaluation;

2013-2018 SIDUS KK – Knowledge Foundation (Stiftelsen) Sweden – Evaluator;

2012 Italian Research Council – Evaluator;

Since early 90's Reviewer of papers for conferences and journals including: ICSE; IEEE Software, IEEE Transactions on Software Engineering; ACM Transactions on Software Engineering and Methodology; Empirical Software Engineering; Information Systems Frontiers; Journal of Systems and Software; Software Quality Journal

Major collaborations

Key companies: Among a network of 70 companies in the ecosystem of the software engineering research group, the main ones are: Reply SPA (Italy), Telenor (Norway), NAV (Norwegian Welfare Norway), Kantega (Norway).

Key scientific collaborators: Patricia Lago, Vrije Universiteit Amsterdam (NL), Tayana Conte, Federal University of Amazonas (BR), Daniela Damian University of Victoria (CA); Vandana Singh, University of Tennessee Knoxville, US, Roger Sørå, NTNU.

On-going grants

- 2022-2025 Craft CrAft – Creating Actionable Futures An EU-funded coordination and support action <https://www.ntnu.edu/smartcities/craft> (2 MEUR)
- 2021-2024 SENOBRe from the Diku programme UTFORSK <https://www.ntnu.edu/idi/senobr> (3 MNOK)
- 2022-2025 Women Stem Up EU funded under Erasmus + <https://women-stem-up.eu> (4 MNOK)
- 2019-2024 e-ladda This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions <https://www.ntnu.edu/e-ladda> 3.8 (MEUR)
- 2020-2024 COST Action CA19122 EUGAIN – Role Chair - European Cooperation in Science and Technology (COST) <https://eugain.eu/> (0.56 MEUR)

Ten years track-record

The last ten years of the research of the PI has been characterized by **(a)** her move to Department Head in 2013, to build a new research and inclusion strategy for the department **(b)** her return to education and research in 2017 and her position as adjunct professor at the University of Tromsø from 2019 to 2022 for building the research group Software For Better Society <https://sbs.idi.ntnu.no/>. In this period she has shown his ability to combine **(i)** heavy and effective managerial duties of running a startup department, **(ii)** groundbreaking research in the area of the proposed grant evidenced also by the high quality papers and the significant amount of grant received, **(iii)** successful transfer of research to society (see Kodeløypa, established in 2014 [1] [2]) effective teaching and mentoring activities, leading successful careers for PostDocs, excellent results of PhDs, and superior performances of supervised on average 6 MSc students per year.

Summary of the most relevant achievements

Management In the last 10 years the PI has very successfully managed the department of Computer Science recruiting excellent professors worldwide, attracting highly talented students (1000 per year in the different study programs associated to the department) also worldwide (from more than 30 countries). She has been interacting with several companies in Norway and Internationally. She has been one of the main actors in the establishment of the Norwegian Open Artificial Intelligence Lab (NAIL), a hub for research, education and innovation within AI in cooperation with Telenor, SINTEF, and other Norwegian actors.

Research During the last 10 years the PI has performed highly qualified research, authoring in the last ten years several journal papers and more than 100 conference and workshop papers. The research has focused on laying the foundation of the present proposal, namely studying how to understand and improve software development at the intersection with gender and other dimensions such as age and disability, and performing the study with a pervasive empirical approach, from experimenting the effects of interventions on people to analysing the resulting data using the latest findings in data analysis and collection and proposing new.

Research Grant In the last 10 years the PI has managed research grants for several MEURO, the most relevant of which are summarized here below

- 2022-2025 NTNU Craft CrAft – Creating Actionable Futures An EU-funded coordination and support action <https://www.ntnu.edu/smartcities/craft> (2 MEUR) (participant)
- 2021-2024 SENOBRe from the Diku programme UTFORSK <https://www.ntnu.edu/idi/senobr> (3 MNOK) (co-leader)
- 2022-2025 Women Stem Up EU funded under Erasmus + <https://women-stem-up.eu> (4 MNOK) (participant)
- 2019-2024 e-ladda This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions <https://www.ntnu.edu/e-ladda> 3.8 (MEUR) (participant)
- 2020-2024 Informatics Europe - Action CA19122 EUGAIN – Role Chair - European Cooperation in Science and Technology (COST) (0.56 MEUR) (action chair)
- 2019-2022 NTNU - IDUN From PhD to Professor – Project Leader – Research Council of Norway (RCN) and NTNU (1 MEUR) (project leader)
- 2016-2019 Cibervoluntarios Association, Spain - SOCRATIC SOcial CReATive IntelligenCe Platform for achieving Global Sustainability Goals - Responsible for NTNU and Work Package Leader – EU Horizon 2020 (2 MEUR)
- 2018-2020 NTNU - INITIATE Innovation through big data and social entrepreneurship – Project Leader – EU Horizon 2020 (0.2 MEUR) (project leader)

- 2017-2020 NTNU - IPIT International Partnership in Information Technology – Project Leader – RCN (0.5 MEUR)

Industry and society impact In the last ten years the PI has been independent director of one of the largest IT companies in Europe (from 2015 to 2018), Reply SPA. Today, Reply counts 14,600 people in 16 different countries.

She has established an educational framework, called Kodeløypa that attracts each week since early 2010 [3], pupils from the region of Trondheim to the university with the goals of letting these children with focus on girls, learn the rudiments of programming [4]. The Kodeløypa framework is being replicated also in schools and in public spaces, like museums and art centers.

Education of young scientists In the last 10 years the PI has achieved remarkable results in educating young scientists. She has trained 8 PostDocs: Anna Szlavi, theme - Gender balance in Informatics - 2022-now; Alicia Julia Wilson Takaoka, theme - Informatics, Climate Neutrality, Marginalized Women, and Access to Technology - 2022 – now; J. David Paton-Romero, theme - Sustainability and gender in Software Engineering - 2021 - 2022 (now researcher at Simula Met); Juan Carlos Torrado, theme - Health Technology, Story Telling - 2019-2021 (now researcher at Oslo Regnesentral); Javier Gomez Escribano, theme - Technology Enhanced Learning for Disability - 2018 (now associate professor at Autonoma de Madrid); Simone Mora, 2016-2017, theme social innovation, (now researcher at MIT, US); Ilias Pappas, 2016-2018, theme social innovation, (now full professor at University of Agder); Michail Giannakos, theme interaction design and children, 2012 - 2013 (now full professor at NTNU); Moreover, she has trained 8 PhDs and she is supervising 4. In this time frame, the PI has also very effectively supervised the theses of bachelor and master students.

Ten of the most important publications

Out of the more than 100 publications of the last 10 years, in this section we list the core publications related to the lecture.

- [1] M. N. Giannakos, I. O. Pappas, L. Jaccheri, and D. G. Sampson, “Understanding student retention in computer science education: The role of environment, gains, barriers and usefulness,” *Education and Information Technologies*, vol. 22, pp. 2365–2382, 2017.
- [2] M. N. Giannakos and L. Jaccheri, “From players to makers: An empirical examination of factors that affect creative game development,” *International Journal of Child-Computer Interaction*, vol. 18, pp. 27–36, 2018.
- [3] S. Papavlasopoulou, M. N. Giannakos, and L. Jaccheri, “Exploring children’s learning experience in constructionism-based coding activities through design-based research,” *Computers in Human Behavior*, vol. 99, pp. 415–427, 2019.
- [4] V. Berg, J. Birkeland, A. Nguyen-Duc, I. O. Pappas, and L. Jaccheri, “Achieving agility and quality in product development - an empirical study of hardware startups,” *Journal of Systems and Software*, vol. 167, p. 110 599, 2020.
- [5] K. Sharma, J. C. Torrado, J. Gómez, and L. Jaccheri, “Improving girls’ perception of computer science as a viable career option through game playing and design: Lessons from a systematic literature review,” *Entertainment Computing*, vol. 36, p. 100 387, 2021.
- [6] A. Nguyen-Duc and L. Jaccheri, “Gender equality in software engineering education—a study of female participation in customer-driven projects,” in *International Conference on Sustainability in Software Engineering & Business Information Management*, Springer, 2022, pp. 39–49.
- [7] E. Rubegni, M. Landoni, L. Malinverni, and L. Jaccheri, “Raising awareness of stereotyping through collaborative digital storytelling: Design for change with and for children,” *International Journal of Human-Computer Studies*, vol. 157, p. 102 727, 2022.
- [8] C. M. Cutrupi, I. Zanardi, L. Jaccheri, and M. Landoni, “Draw a software engineer test - an investigation into children’s perceptions of software engineering profession,” in *2023 IEEE/ACM 45th International Conference on Software Engineering: Software Engineering in Society (ICSE-SEIS)*, 2023, pp. 37–47.
- [9] A. Capiluppi and L. Jaccheri, “Bootling and rebooting academia-industry collaborations within software engineering courses,” *IEEE Software*, pp. 1–7, 2023.
- [10] M. Bondioli, M. C. Buzzi, M. Buzzi, S. Chessa, L. Jaccheri, C. Senette, and S. Pelagatti, “Guidelines for research and design of software for children with ASD in e-health,” *Universal Access in the Information Society*, 2023.