

Selpi's CV

Full Name Selpi
Address Rännvägen 6, SE-41296 Gothenburg, Sweden
Email selpi at chalmers.se
Links ORCID, Google Scholar, LinkedIn

Current Employment

2021 – now **Researcher (Data Science and AI)**
Chalmers University of Technology, Computer Sci. & Eng., Sweden

Doctoral Education

2004 – 2008 **PhD in Computing**
The Robert Gordon University (RGU), United Kingdom
Thesis: An Inductive Logic Programming Approach to Learning which uORFs Regulate Gene Expression
Area: Machine learning, statistical rule learning, bioinformatics
Supervisors: Dr. Christopher H. Bryant and Prof. John McCall

Recent Grants

2024-2025 **An interpretable, self-explaining method for traffic safety applications**
Funder: Chalmers Area of Advance Transport
Role: Co-applicant;
Total budget: 2 000 000 SEK

2023-2027 **Deep MultiModal Learning for Automotive Applications**
Funder: Sweden Innovation Agency Vinnova
Role: Co-applicant, supervisor for one PhD student
Total budget: 24.5 mSEK, Chalmers: 5 344 773 SEK

2021 – 2024 **PANACEA (Practical and Effective tools to monitor and Assess Commercial drivers' fitness to drive)**
Funder: EU H2020
Role: Chalmers-applicant, WP leader
Total budget: EUR 3.498 million; Chalmers: EUR 246 298

Supervision Experience

Postdoc

2019 – 2021 Eleonora Andreotti, Postdoc researcher, Topic: Impact of vehicle automation in mixed traffic, my role: **Supervisor**

PhD students

2023 (Sept) - now	Amer Mustajbasic, Industrial PhD student at Chalmers, my role: Co-supervisor (main supervisor in practise)
2018	Teemu Itkonen, Visiting student at Chalmers from Aalto University, Finland; stayed for 4 months, my role: Supervisor
2017 – 2018	Tong Liu, Visiting student at Chalmers from Chang’an University, China; stayed for 6 months, my role: Supervisor
2009 – 2014	Henrik Lind, Part-time Industrial PhD Student at Chalmers, my role: Co-supervisor

Master’s and bachelor students

Supervisor for 37 master’s students (for theses), 7 master’s students (for non-thesis projects), and 12 bachelor students (for theses) during period 2012-2023. **Co-supervisor** for one master’s student (for thesis) in 2011.

Recent Teaching Experience (from 2020)

Chalmers and GU, Computer Science and Engineering

2021 – now	Python for data scientists Number of participants: \approx 40-45/class Examiner (2022-) and course responsible (2021-)	MSc course
2019 – now	Applied Machine Learning Number of participants: \approx 90-110/class Examiner and course responsible (2022-), Led the discussion sessions in flipped classroom setting (2021), Main lecturer (2020), Guest lecturer (2019)	MSc course
2020 – 2021	Introduction to Data Science and AI Number of participants: \approx 150/class Lecturer (2021), Course responsible (2020)	BSc/MSc course

Pedagogical Training

2017	Coaching: An approach to supervision of doctoral students <i>Chalmers University of Technology, Sweden</i>
2016	Diploma of Higher Education (pedagogic) <i>Chalmers University of Technology, Sweden</i>
2016	Handledareforum II (PhD Supervisors forum) <i>Chalmers University of Technology, Sweden</i>
2004	Introducing Teaching and Demonstrating <i>The Robert Gordon University, UK</i>

Function and Commissions of Trust

Academic leadership tasks

2015 – 2020 **Director of Graduate/Doctoral Studies**
Chalmers University of Technology, Sweden
Led Graduate School Machine and Vehicle Systems

Academic tasks within the home university

2018 **Reviewer/assessor**
for evaluation of graduate/research schools at Chalmers

2016 – 2017 **Member of Reference Group and Internal Reviewers for National Evaluation of Research Education ("UKÄ utvärdering")**
As a sounding board for discussing strategic questions.
Conducted internal review of materials from research schools at Chalmers before being sent for national evaluation of research education in Sweden

2016 – 2017 **Member of CUF ("Coaching och utvärdering av forskarassistenter) committee**
Coached assistant professors at Mechanics and Maritime Sciences

2015 – 2020 **Director of Graduate/Doctoral Studies**
Chalmers University of Technology, Sweden
Offered sound advice & feedback to ≈35 PhD students/year and their supervisors and examiners; Led Grad. School Machine and Vehicle Systems
Evaluation result in 2018: very well functioning research school

Throughout Active participation in local/collegiate meetings, in nominating colleagues for certain positions/prizes/awards

Academic tasks outside the home university

2022 **Discussion leader ("diskutant") at Licentiate seminar**
Ivan Postigo, Linköping University, Sept 2022

2021 – now **Expert Evaluator for EU Horizon Europe Programmes**
2021, 2022, 2023

2021 – now **International collaborator for a Ph.D. programme at Nagoya University, Japan**
<https://www.tmi.mirai.nagoya-u.ac.jp/en/>
Invited by Prof. Kazuya Takeda, Vice President, Nagoya University

2016 – now **Associate Editor**
IEEE Trans. on Intelligent Transportation Systems T-ITS (2021 – now; T-ITS is a flagship, top-ranked journal in the field of ITS)
IEEE Intelligent Vehicle Symposium (2016 – 2021)

2015 – now **Reviewer for Journals**
including IEEE T-ITS, IEEE OJ-ITS, AAP, Human Factors
Received certificate of *Outstanding Contribution in Reviewing* from Elsevier in 2017

Academic tasks outside the home university – continues

- 2015 – now **Reviewer for Conferences**
IEEE CDC (2019), IEEE IV (2016, 2017, 2018, 2019, 2020, 2021), IEEE ITSC (2018, 2019, 2021), ICSIIT (2015, 2017), HFES's Int. Annual Meeting (2015, 2016), FASTzero (2015)
- 2015 – now **Member of Scientific/Technical Committees**
IEEE ITS Naturalistic Driving Data Analytic (2015 – now), FAST-zero (2015), ICSIIT (2015, 2017)

Conferences/Workshops/Seminars Organisation

- 2023-2024 **Co-organiser, Interpretable AI Theme**
Part of Chalmers AI Research Centre (CHAIR) themes.
- 2021 – 2022 **Lead organiser, Spotlight on Research seminar series**
Part of Chalmers AI Research Centre (CHAIR) seminar series.
- 2016 **Lead organiser, 3rd Workshop on Naturalistic Driving Data Analytic, as part of IEEE Intelligent Vehicles Symposium (IV'16)**
Led the workshop preparation, drafted workshop proposal, handled paper-review process, created workshop programme together with two co-organisers, run the workshop together with two co-organisers.
- 2016 Session co-chair, IEEE IV 2016
- 2015 Session co-chair, FASTzero 2015

Invited Talks Outside Own Group (from 2019)

- 2023 **IEEE ITSC 2023, Bilbao, Spain**
Invited keynote and panel member at the panel discussion at Workshop "Data-driven and empirical research for emerging mixed traffic". My keynote talk: *Proposal for a smooth transition to traffic with fully autonomous vehicles*
- 2022, 2023 **Department of Industrial and Materials Science, Chalmers**
Invited lecture in MSc course on *Data science in product realization*
My lecture title: *Examples of ML methods*
- 2021 **Malmö University, Sweden**
Invited lecture in PhD course on *Current Topics in Data Science*
My lecture title: *Challenges and opportunities with time series analysis*
- 2019 **Joint Chalmers & JARI (Japan Automobile Research Institute) Seminar, Sweden**
Invited to present projects involving mixed-traffic simulation

Other Service/Volunteering/Outreach

- 2024 **Digital jury for the Young Researchers Exhibition in Sweden.**
Link to "Utställningen Unga Forskare"
- 2023 **Workshop co-organiser at Vetenskapsfestivalen in Sweden.**
Theme: "Explore data on the Web in a new way" using SPARQL.
Vetenskapsfestivalen is an annual science festival in Gothenburg.
- 2017 **Initiated and coached two teams competing in KDD Cup 2017**
KDD is Knowledge Discovery & Data Mining. KDD Cup is an annual competition as part of a premier conference in data mining and knowledge discovery. One of the teams ranked 26th from 3 582 teams.
- 2005, 2006 **Science Demonstrator at TechFest in Scotland**
TechFest is Aberdeen and the North-East of Scotland's annual festival of Science, Technology, Engineering & Mathematics, UK.

Other Relevant Courses/Training

- 2018 **Effective Personal Leadership**
Leadership Management International
- 2012 **Project management course based on the Value Model**
By Per Lindstedt
- 2003 **Youth Encounter Sustainability**
Alliance for Global Sustainability, ETHsustainability, Switzerland