

# Selpi's CV

Full Name Selpi  
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Links ORCID, Google Scholar, LinkedIn

## Current Employment

2024 – now **Senior Researcher (Data Science and AI)**  
*Chalmers University of Technology, Computer Sci. & Eng., Sweden*  
Lead WP3 "Methodologies for Assessment" in EU-H2020 PANACEA  
Teach courses & supervise students in area Applied ML/AI, Data Science  
Head of Unit for Data Science and AI-1

## Recent Degrees

2024 **Docent in Computer Science**  
*Chalmers University of Technology, Computer Sci. & Eng., Sweden*

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, 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: Chalmers-CSE-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 employed at Zenseact, my role: **Supervisor**

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 University of Technology and University of Gothenburg, Computer Science and Engineering

2021 – now	<b>Python for data scientists</b> Number of participants: $\approx$ 40-45/class Examiner (2022-) and course responsible (2021-)	MSc course
2019 – now	<b>Applied Machine Learning</b> 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	<b>Introduction to Data Science and AI</b> 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**  
*Chalmers University of Technology, Sweden*
- 2016      **Diploma of Higher Education (pedagogic)**  
*Chalmers University of Technology, Sweden*
- 2016      **Handledareforum II (PhD Supervisors forum)**  
*Chalmers University of Technology, Sweden*
- 2004      **Introducing Teaching and Demonstrating**  
*The Robert Gordon University, UK*

## Function and Commissions of Trust

### Academic leadership tasks

- 2024 – now      **Head of Unit Data Science and AI-1**  
*Chalmers University of Technology, Sweden*  
Manager for 29 employed PhD students, 11 postdocs, 8 industrial PhD students (only related to their work at Chalmers), and several short-term employees
- 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, 3<sup>rd</sup> 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 26<sup>th</sup> 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*