



Fabio Roli

Full professor

✉ fabio.rolì@unige.it

Education and training

1992

PhD in Electronic Engineering

University of Genoa - IT

1988

Laurea (M.S. degree) in Electronic Engineering

University of Genoa

Academic experience

2021 - ONGOING

Full Professor

University of Genoa

2001 - 2021

Full Professor

University of Cagliari

1998 - 2001

Associate Professor

University of Cagliari

1995 - 1998

Assistant Professor

University of Cagliari

1994 - 1995

Adjunt Professor

University of Trento

Work experience

2015 - ONGOING

Partner of Pluribus One SRL

Pluribus One SRL <https://www.pluribus-one.it/>

1998 - ONGOING

Founding Director of the PRA Lab

PRA Lab <https://pralab.diee.unica.it/>

Teaching activity

University teaching

- 2022 Trustworthy Artificial Intelligence (University of Genoa)
- 2022: Database Systems (University of Genoa)
- 1996-2022: Computer Architectures (undergraduate course University of Cagliari)
- 1998-2010: Artificial Intelligence (graduate semester course University of Cagliari)
- 2001-2015: Pattern Recognition (graduate semester course University of Cagliari)
- MSc and PhD course on “Multiple Classifier Systems”, Nanjing University, China, October 7-15, 2008
- MSc and PhD course on “Elements of Statistical Pattern Recognition”, South China University of Technology, China, 19-27 July 2012
- MSc and PhD course on “Elements of Statistical Pattern Recognition”, Huazhong University of Science and Technology, China, 20-27 October 2014
- MSc and PhD course on “Machine Learning”, Huazhong University of Science and Technology, China, 7-14 October 2015
- MSc online course on “Machine Learning”, Xidian University, China, 17 June – 23 June 2020
- MSc online course on “Machine Learning”, Northwestern Polytechnical Univ., China, 20 July – 7 August 2020

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

Student mentoring and leadership

Prof. Roli has advised 20 doctoral students over his career and is currently supervising five more. In 1995, few years after his Ph.D., he moved to the University of Cagliari where he founded from scratch the Pattern Recognition and Applications laboratory (<https://pralab.diee.unica.it/>), which is now a world-class research lab with 30 staff members including six tenured Faculty members. In 2007, he created the Laboratory of Ambient Intelligence of the Sardinia DistrICT, within the Sardinia Scientific and Technology Park in Italy. In 2015, he co-founded Pluribus One, a research-intensive startup company that develops computer security products using AI technologies (<https://www.pluribus-one.it>).

PhD committees membership

Head of the PhD Program in Electronic Engineering and Computer Science

at the University of Cagliari (2013 – 2018)

Research interests

Fabio Roli's research over the past years has addressed the design of **pattern recognition** and **machine learning** systems in the context of real **security** applications. He has provided outstanding contributions to the fields of **ensemble learning** and **adversarial machine learning**, and he has played a leading role in the establishment and advancement of this research themes. Prof. Roli is one of the **pioneers** of the use of **machine learning** for **computer security**. He is often invited to give keynote speeches and tutorials on adversarial machine learning and machine learning for cybersecurity applications. He is (or has been) the PI of dozens of R&D projects, including the leading European projects on Security & Privacy CyberRoad and ILLBuster. Prof. Roli talked about his career and his main scientific contributions on the receipt of the "Pierre Devijver Award". Video of his talk is available here:
<https://www.youtube.com/watch?v=HbRLziqKWKI&t=1s>

Grants

2019 - ONGOING

RexLearn Reliable and Explainable Adversarial Machine Learning

Ministry of Italian University and Research PRIN 2017

Principal investigator

2017 - 2019

LETS CROWD (Law Enforcement agencies human factor methods and Toolkit for the Security and protection of CROWDs in mass gatherings)

European Union H2020

Principal investigator

2015 - 2019

Advanced social enGineering and vulnerability Assessment

European Union H2020

Principal investigator

Editorial activity

Editorial activities

Advisory editor International Journal Machine Learning and Cybernetics

Associate editor of the Pattern Recognition Letters journal (until 2011)

Associate editor of the Pattern Analysis and Applications journal

Associate editor of the Electronic Letters on Computer Vision and Image Analysis (until June 2008)

Associate editor of the Information Fusion journal (until 2005)

Associate editor of the Journal of Advances in Information Fusion (until August 2008)

Assignments abroad

2019-2022 Visiting Professor, Northwestern Polytechnical Univ., China (Shaanxi Thousand Talents Plan)

2015, Oct.: Visiting Professor, Huazhong University of Science and Technology, China

2014, Oct.: Visiting Professor, Huazhong University of Science and Technology, China

2012, July: Visiting Professor, South China University of Technology, China

2008, Oct.: Visiting Professor, Nanjing University, China

Other professional activities

Member of the NATO panel for Information and Communications Security, NATO Science for Peace and Security (2008 – 2011)