
Research topics	Holistic and Generalizable Solutions for Bias Mitigation in Face Recognition
Position (M/F)	PhD, thesis offer
Reference offer	SN/CG/fairness/092025
Research Department	Digital Security (SN)
Publication date	29/08/2025
Start date	January 2026
Duration	Duration of the thesis

Description

EURECOM's Digital Security Department is seeking a highly motivated PhD candidate to join the GOOD-BIAS! research project, supported by the French National Research Agency (ANR). This project addresses one of today's most pressing challenges: ensuring fairness, robustness, and transparency in AI-driven face recognition systems. While recent advances in AI have revolutionized computer vision and biometrics, they often suffer from bias, lack of transparency, and shortcut learning, leading to unfair and unreliable outcomes across demographic groups. GOOD-BIAS! sets out to design the next generation of trustworthy algorithms, capable of delivering robust and equitable results under real-world conditions.

The PhD candidate will contribute to:

- Developing robust and fair computer vision algorithms for face recognition in applications such as identity verification, age/gender classification, presentation attack detection, and deepfake detection;
- Designing holistic evaluation metrics that balance accuracy and fairness;
- Investigating and disentangling sources of bias beyond demographics, including data quality and acquisition conditions;
- Exploring generalisation strategies to achieve robust performances across heterogeneous biometric data and AI models.

We are looking for a passionate candidate with a strong background in machine learning or computer vision, solid programming skills, and a strong interest in ethical and trustworthy AI.

This fully funded 3-year PhD position offers an outstanding opportunity to conduct cutting-edge research in a world-class environment. You will closely collaborate with leading experts in AI, biometrics, and fairness from academy and industry. The position includes opportunities to visit international laboratories and to present your work at major scientific conferences, providing exceptional visibility within the research community.

Requirements

- Education Level / Degree: Master's degree (or equivalent) in Computer Science or related fields.
- Field / specialty: Machine Learning / Biometrics / Image Forensics / Signal and Image Processing.
- Technologies: good knowledge of parallel computing platforms.
- Languages / systems: ability to produce clean and efficient code given any programming language manual. Most of the existing code is written in Python and C/C++.
- Other skills / specialties: strong signal/image processing background.
- Other important elements: Excellent analytical thinking and a strong motivation to work on interdisciplinary research problems. Fluency in English (language of work).



Application

The application must include:

- Detailed curriculum,
- List of publications specifying the three most important publications,
- Motivation letter of two pages also presenting the perspectives of research and education,
- Name and address of three references.

Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference : **SN/CG/fairness/092025**

About EURECOM

EURECOM is a major Engineering School and a Research Center in digital sciences founded in 1991 as a consortium in the international technology park of Sophia Antipolis. The IMT is a founding member of the GIE. Teaching and research activities are organized around 3 promising fields: digital security, communication systems and Data Science.

EURECOM has a staff of 150 (researchers and support teams) and welcomes 400 international students on the Campus Sophia Tech, the largest information science and technology campus of the region. EURECOM enjoys a privileged geographical environment on the French Riviera (Côte d'Azur), between sea and mountains, at the heart of a dynamic and multidisciplinary ecosystem that promotes high-level scientific and technological innovation.

Social advantages

- International and multicultural environment
- Attractive salary - Corporate saving plans
- Private retirement plan (executive, employer participation of 100%)
- Employee profit sharing policy
- Company health insurance (mutuelle) with high levels of guarantees for the whole family (employer participation of 60%)
- Restaurant vouchers (employer contribution of 60%)

EURECOM is one of Europe's leading engineering schools specializing in digital technologies. It is located in the heart of the Côte d'Azur, in Europe's Silicon Valley (Tech Park Sophia-Antipolis). EURECOM's research teams work in an international, multicultural environment.

EURECOM has a dynamic policy in terms of **inclusion and quality of life at work**. We are committed to diversity and give equal consideration to all applicants, without discrimination. Above all, we look for competence and team spirit.

All our positions are open to **people with disabilities**. EURECOM has set up a disability advisor to provide support and advice, organize accommodation and make positive commitments to personal integration.

As part of its **gender equality plan**, EURECOM encourages gender diversity within its teams. As part of our gender equality action plan, we encourage male applications for administrative positions, traditionally held by women, and female applications for IT and research positions, traditionally held by men.

EURECOM is taking positive action as part of its **CSR policy**. A CSR representative oversees EURECOM's CSR and energy transition policies (electric charging stations, solar panels, waste sorting, etc.).

Web site EURECOM: <https://www.eurecom.fr/fr/eurecom/presentation>

EURECOM in VIDEO: <https://www.youtube.com/watch?v=u1IFcgNijnM>

Employee experience: <https://www.youtube.com/watch?v=BHv9zlduzuQ>