Tamim El Ahmad

PhD · Machine Learning

tamim-el.github.io

(+44) 7823931228

Edinburgh, United Kingdom

elahmad.tamim@gmail.com

github.com/tamim-el

Research Experience

UNIVERSITY OF EDINBURGH
Jan. 2025 – Present

Postdoctoral researcher (Sup. A. Teckentrup) — *Edinburgh, United Kingdom*
- RESEARCH TOPICS: Gaussian Processes, Partial Differential Equations

TÉLÉCOM PARIS
Jan. 2021 – Jul. 2024

PhD in Machine Learning (Sup. F. d'Alché-Buc, P. Laforgue) — *Paris, France*
- TITLE: Learning Deep Kernel Networks: Application to Efficient and Robust Structured Prediction
- RESEARCH TOPICS: Kernel Methods, Random Projections, Structured Prediction, Neural Networks

Other Experience

TÉLÉCOM PARIS
Oct. 2020 – Jan. 2021

Research Engineer in a joint project with Valéo — *Paris, France*
- Research and development for unsupervised anomaly detection (One-Class SVM, Isolation Forest, Data Depth)
- Development of an unsupervised anomaly detection library (Python)

TÉLÉCOM PARIS
May 2020 – Sep. 2020

Research Intern — *Paris, France*
- Research and development for structured prediction: hybrid architecture based on kernel methods and neural networks (PyTorch)

MÉDICIS
Jun. 2019 – Aug. 2019

Computer Science Intern — *Paris, France*
- Development of a NoSQL data entry server (MongoDB)

SANOFI
Jun. 2018 – Aug. 2018

Computer Science Intern — *Paris, France*
- Research and development of a deep learning model for automatic recognition of IC-50 curves (Keras, Knime)

Education

ÉCOLE NORMALE SUPÉRIEURE PARIS-SACLAY
Sep. 2019 – Sep. 2020

Master's degree MVA - Machine Learning and Computer Vision — *Paris, France*

ÉCOLE DES MINES DE SAINT-ÉTIENNE
Sep. 2016 – Sep. 2020

Engineering Degree - Computer and Data Science — *Saint-Étienne, France*

UNIVERSITÉ PARIS-DIDEROT
Sep. 2018 – Sep. 2019

Academic gap year in Master 1 - Applied Mathematics — *Paris, France*

UNIVERSIDAD DE BUENOS AIRES Aug. 2017 – Dec. 2017
Exchange Program - Computer and Data Science *Buenos Aires, Argentina*

UNIVERSITÉ JEAN MONNET Sep. 2016 – Sep. 2017
Bachelor's degree - Mathematics *Saint-Étienne, France*

Academic Duties

Teaching Assistant Jan. 2021 – Jun. 2024
Télécom Paris *Paris, France*
- Tutorials: Statistics, Convex Optimisation
- Practical Sessions: Statistics, Convex Optimisation, Kernel Methods, Introduction to Machine Learning, Structured Prediction

Reviewer Jun. 2022 – Present
AISTATS, JMLR, TPAMI

Talks May 2023 – Present
Alan Turing Institute, DataSig team (Online, May 23)
Conférence sur l'Apprentissage automatique (Strasbourg, Jul. 23)
Journées de Statistique (Bordeaux, May 24)
Conférence sur l'Apprentissage automatique (Lille, Jul. 24)
KAIST AI, OSI Lab (Seoul, Jul. 24)
Yonsei University (Seoul, Jul. 24)
ECML PKDD (Vilnius, Sep. 24)
Prob_AI Hub seminar (Onlime, Jan. 25)
Numerical Mathematics and Data Science seminar (Edinburgh, Jan. 25)

Publications

Deep Sketched Output Kernel Regression for Structured Prediction (ECML PKDD 2024).
T. El Ahmad★, J. Yang★, P. Laforgue, F. d'Alché-Buc.

Sketch In, Sketch Out: Accelerating both Learning and Inference for Structured Prediction with Kernels (AISTATS 2024).
T. El Ahmad, L. Brogat-Motte, P. Laforgue, F. d'Alché-Buc.

Fast Kernel Methods for Generic Lipschitz Losses via p-Sparsified Sketches (TMLR 2023).
T. El Ahmad, P. Laforgue, F. d'Alché-Buc.

Other Interests

Musical education and Guitar: 10 years, National school of music Marcel Dadi in Créteil
Sport: Fencing (8 years of practice), Football, Swimming