Afonso Eduardo

aflme.github.io | LinkedIn | GitHub | aflmeduardo@gmail.com | Mobile: +351926331208

SUMMARY

Afonso holds a **Master's in Electrical and Computer Engineering** from Instituto Superior Técnico (IST), University of Lisbon (Portugal) and a **Master's in Artificial Intelligence** from The University of Edinburgh (UK). He specialized in a range of topics related to signal processing, telecommunications, hardware-software systems and Bayesian machine learning. He has worked on tools for algorithmic trading and methods for physiological signal processing. His interests in Bayesian statistics led him to pursue a PhD in Machine Learning at The University of Edinburgh, having focused on **high-dimensional Bayesian optimization and inference**. Other interests include stochastic processes and time series analysis.

EDUCATION

Doctoral Student in Machine Learning

Bayesian Optimization and Inference

University of Edinburgh, UK

Location: Lisbon, Portugal

Mar.19 - Apr.20 Oct.21 - Apr.23

MSc in Artificial Intelligence

Bayesian Statistics and Machine Learning

University of Edinburgh, UK Sep.17 – Aug.18

MSc Thesis: High-dimensional Bayesian optimization for Learning in Generative Models

MSc Grade: 89% (A) Thesis Grade: 89% (A) Award: Howe Masters Prize (best student)

BSc + MSc in Electrical and Computer Engineering

IST, Portugal

Signal Processing, Telecommunications and Embedded Systems

Oct.09 - Apr.15

MSc Thesis: Link Adaptation Strategies for Cellular Downlink with low-fixed-rate D2D Underlay

Erasmus Student, APNet, Aalborg University, Denmark.

Feb.14 - Sep.14

BSc Grade: 17/20 (A, top 7%) MSc Grade: 18/20 (A, top 1%) Thesis Grade: 19/20 (A)

TECHNICAL SKILLS

Languages

Proficient: C/C++, MATLAB, Markdown and Python Familiar: Assembly, Java, Julia, SQL, XML, VHDL

Developer Tools

Versioning and Revision Control: Git, SVN

Web-based Computing: Jupyter

Software

Machine Learning: Pytorch, Tensorflow, Keras

Bayesian Inference: BUGS, JAGS

FPGA-based Hardware Acceleration: Xilinx ISE

EXPERIENCE

Tutor Jan.20 – Apr.20

Postgraduate Course: <u>Probabilistic Modelling and Reasoning</u>
University of Edinburgh, UK

Research Assistant Jul.16 – Apr.17

Pattern and Image Analysis Instituto de Telecomunicações, Lisbon, Portugal

Project: LearnBIG

Denoising and Representation Learning of Physiological Signals for Biometric Systems

Development of tools for backtesting, performance attribution and risk analysis

Quantitative Analyst Sep.15 – Jul.16

PASS - Tecnologias de Informação (FinTech Startup)

Lisbon, Portugal

R&D of methods for asset pricing (technical analysis), portfolio optimization and rebalancing

1/2

LANGUAGES

Portuguese: Native Speaker **English:** Proficient User

Certificates:

International English Language Testing System (IELTS) - Academic Module

Date: November 5th, 2016

Scores: Listening - 9.0, Reading - 8.5, Writing - 8.0, Speaking - 7.0

Overall Band Score: 8.0

PUBLICATIONS

Machine Learning

Afonso Eduardo, Michael Urs Gutmann, Bayesian Optimization with Informative Covariance, Transactions on Machine Learning Research (TMLR), 2023.

Afonso Eduardo, Helena Aidos, Ana Fred, ECG-based Biometrics using a Deep Autoencoder for Feature Learning: An Empirical Study on Transferability, International Conference on Pattern Recognition Applications and Methods (ICPRAM), 2017.

Wireless Communications

Afonso Eduardo, Ivo Sousa, António José Rodrigues, Link Adaptation Strategies for Cellular Downlink with low-fixed-rate D2D Underlay, International Symposium on Wireless Personal Multimedia Communications (WPMC), 2015.