Mehdi Bahri *PhD Student in Machine Learning*

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Education

Imperial College London   LONDON, UNITED KINGDOM

PhD. Machine Learning   *2017 – (2021)*
Geometric Deep Learning & Generative Models with applications to Computer Vision.
Full scholarship from the Department of Computing. *Supervisor: Dr Stefanos Zafeiriou.*

MSc. Advanced Computing - *Distinction (84%)*   *2015 – 2016*
*Awarded the **Winton Capital Computing MSc Project Prize** for best thesis in Computer Science (1/188 students).*

Grenoble INP - Ensimag   GRENOBLE, FRANCE

BSc. and MSc. Applied Mathematics and Computer Science - *with High Honours*   *2010 – 2016*
2010 - 2013: Classes Préparatoires aux Grandes Écoles PC* - Lycée Chateaubriand, Rennes, France.

Professional Experience and Selected Projects

JPMorgan Chase & Co - Quantitative Associate Intern   LONDON, UNITED KINGDOM

Systematic Trading LQR   *06/18 - 09/18*
Quantitative Research Off-Cycle Internship in Machine Learning.
Time series forecasting and volatility modeling for automated trading of single stocks options

Speechmatics (Cantab Research Ltd.) - Speech Recognition Intern   CAMBRIDGE, UNITED KINGDOM

Research & Development   *04/17 - 07/17*
Improving the RNN language models by implementing research papers in TensorFlow and C++.
Divided model size by 4 while keeping the same cross-entropy loss / perplexity and WER.

HarperCollins Publishers - Data Scientist   LONDON, UNITED KINGDOM

Global Pricing and Analytics   *09/16 - 03/17*
Graph mining and influence maximization to maximize uplift of books on special offers.
Analyzed MongoDB databases of more than 100Gb with scikit-learn and networkx.

Imperial College - Master's Thesis   LONDON, UNITED KINGDOM

Robust Low-Rank Modeling on Tensors: New Algorithms and Extensive Comparisons   *04/16 - 09/16*
Devised 4 ADMM solvers and a Variational Bayes algorithm for robust tensor factorizations (extensions of matrix factorizations) in MATLAB. Compared against 11 state-of-the-art methods on computer vision benchmarks, analyzed 500Gb of experimental data, and showed improvements of up to 16% higher PSNR and FSIM. Published in top venue. *Supervisors: Dr Stefanos Zafeiriou & Dr Yannis Panagakis.*

Selected Publications

- **M. Bahri**, Y. Panagakis, and S. Zafeiriou, "Robust Kronecker Component Analysis" *IEEE TPAMI, Special Issue on Compact and Efficient Feature Representation and Learning in Computer Vision, 2018 (accepted for publication)* **(arXiv:1801.06432)**

- **M. Bahri**, Y. Panagakis, and S. Zafeiriou, "Robust Kronecker-Decomposable Component Analysis for Low Rank Modeling" in International Conference on Computer Vision (ICCV) 2017

Skills

	Computing skills		Languages	
Programming *(advanced)*	Python, Java, C, Shell		French	*Native*
Programming *(intermediate)*	SQL, Javascript, Prolog, C++		English	*Fluent*
Modeling	MATLAB, R, NumPy/SciPy, TensorFlow, Scikit-learn		Spanish	*Intermediate*
Tools	Git, LaTeX, MongoDB			

Interests

Fitness, Nutrition • Elected Student Representative, *Ensimag* • Morgan Stanley Campus Ambassador, *Ensimag*

REFERENCES AVAILABLE UPON REQUEST.