Baptiste Bauvin

Machine Learning PhD,

GRAAL - ULaval - 2022

Experience

Academic

2017-2023 Machine Learning PhD, GRAAL-Santé, QC, Canada.

Multi-omic machine learning and interpretable algorithms.

Focus on ensemble methods, form PAC-Bayesian theory to applications to biological multi-omic tasks and multi-view framework coding.

Summer Machine learning research internship, GRAAL, QC, Canada.

2016 Developing a multi-omic binary classifier based on the SCM. Graded A.

Winter 2016 Research project, École Centrale Marseille (ECM), Marseille, France.

Analysis of two multi-view algorithms, Mumbo and MVM. Graded A.

Summer Robotics vision research internship, ACIN/V4R, Vienna, Austria.

2015 Providing a path-finding algorithm for a mobile robot, based on laser and kinect sensors.

Summer Machine learning research internship, LIF, Marseille, France.

2014 Building a multi-class classification algorithm based on SVMs for vocal recognition. Graded A.

Winter 2013 Research project, École Centrale Marseille (ECM), Marseille, France.

Study of Γ -free matrices and Bunneman graphs for species classification. Graded A.

2012-2013 Transversal project, École Centrale Marseille (ECM), Marseille, France.

Mesh network building for pollution sensors based on Arduino boards, shared on a website. Graded A.

Summer **Production internship**, Belle-de-Mai Incubator, Marseille, France.

2013 Audit, debugging update of the incubator's internal management software. Graded A.

Volunteering

2014 President & Webmaster, Phy-TV, ECM, Marseille.

School's audiovisual association: video editing, FX, event planning, external contracts.

2014-2015 Active Member and Regisseur, Bureau des Arts, ECM, Marseille.

Regisseur during on scene events, and active member

2013-2014 Webmaster, Festival Massiliades, ECM, Marseille.

Website management based on DRUPAL and HTML5/CSS/PHP/MySQL.

Other

2014-2015 Web-designer & software engineer (Front & Back-End), KSI, ECM, Marseille.

Concept and development of a web-site for a client of the junior company

Formation

2015-2016 Fundamental Computer Science Master, Aix-Marseille Université, Marseille, France.

Focus on : Inferential Statistics, Machine Learning, Logic and Automatons, Algorithmic, Metric Spaces, Graphs and Networks Algorithmic.

2012-2016 General Engineering Degree, ECM, Marseille, France.

Engineering Degree, focusing on : Fundamental Computer Science, IA, Telecommunications, Microcontrollers.

Major in : Computer Science, Networks, Data Science, Android.

2010-2012 **Preparatory Class**, Lycée Faidherbe, Lille, France.

Focus on Fundamental Computer Science in excellency boarding school.

Computer Science Skills

Python ML Scikit-learn, Pytorch, HDF5, Pandas, Numpy.

Languages JAVA, C++, SQL, PYTHON, Caml, Maple, Matlab. Platforms OS X, GNU/Linux, Windows, Arduino, Android.

Web PHP, HTML5, CSS3, JAVASCRIPT(JQuery), MySQL, Drupal.

Others Any office suite, LATEX.

Languages

Native French

Professional English

Advanced German (B2)

Beginner Portuguese, Italian, Arabic.

Hobbies

Hands-on Construction, Electronics, Hardware, Mechanics, Sewing.

Sports Dragon Boat, Hockey, Skiing, Dancing.

Cultural Travelling (China, India, Egypt), Music (Tuba, Guitar, Bass, Drums), Cooking.