Brice Olivier *27 years old*

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Experience

Inria, Laboratoire Jean Kuntzmann, Gipsa-lab — Grenoble, France
Doctoral Research in statistics applied to cognitive science *2015 - 2019*

- Designed and implemented a random restart strategy for Hidden semi-Markov models (HSMMs),
- identified and characterized human reading strategies in information search tasks using HSMMs,
- analyzed concomitant electroencephalograms (EEGs) with HSMMs, maximal overlap discrete wavelet transform (MODWT) and Small-world network,
- designed and implemented an Asynchronous (delayed signals) Heterogeneous (regarding data types and sampling rates) Hidden semi-Markov model for concomitant eye movements and EEGs analysis.

Ensimag — Grenoble, France
Teaching *2016 - 2018*

Applied Probabilities : Full-charge - 2nd year of engineering school (equivalent 1st year of master's degree)- pseudo random number generators, random variable simulation, joint/conditional/marginal distributions, properties of some distributions, Markov chains, queueing theory.
Statistical methods : Lab sessions - 1st year of engineering (equivalent 3rd year of bachelor's degree) - descriptive statistics, estimators, confidence interval, hypothesis testing, linear regression.

Inria — Grenoble, France
Research Intern on robust high dimension regression *2015 (6 months)*

- Implemented a robust non-linear high dimension regression model based on a mixture of locally-linear multivariate t regression components,
- tested the model on a wide variety of datasets,
- raised and solved theoretical modeling issues.

Laboratoire ERIC — Lyon, France
Research Intern on data warehousing and OLAP analysis for textual data *2014 (5 months)*

- Analyzed all open source tools for OLAP analysis,
- jointly designed with EDF (french energy supplier) and implemented a datawarehouse and OLAP analysis for online opinion mining, in the context of a french national research agency (ANR) funded project: *ImagiWeb*.

e-Conception — Charnoz-Sur-Ain, France
Web Developer Intern *2012 (3 months)*

Education

Université Grenoble Alpes — Grenoble, France
PhD in Applied Mathematics *Expected in June 2019*

Université Lumière — Lyon 2, France
MSc in Computer Science with specialization in Knowledge Discrovery in Databases *2015*
Major Fields : Machine learning, data analysis, statistics, optimization, bayesian network.

Université Claude Bernard — Lyon 1, France
BSc in Computer Science *2013*
Major Fields : Algorithmic, programming (system, parallel, object-oriented), database, mathematics.

Skills

Programming languages : Python, R, Matlab, Julia, C, C++, SQL.
Operating Systems : Linux (Ubuntu, Debian, Arch Linux), bash, architecture.
Database management systems : Structured DBMS, semi-structured (XML, JSON), NoSQL (MongoDB).
Practices : Git, automation, conception, testing, data visualization (ggplot2, matplotlib, seaborn).

Natural languages : French *(mother tongue)*, English *(full professional proficiency)*, Spanish *(limited working proficiency)*, Hindi *(beginner)*.

Activities

Postgraduate Education : Miscellaneous conferences / seminars in statistics and eye-movement. Advanced Statistics and Data Mining Summer School, Madrid 2016. Deep learning reading group, Inria. Pedogogy training courses through doctoral school MSTII, Grenoble. A. Ng's Machine learning course on Coursera.
Personal Interests : Ecology, healthy/exotic cooking, trail running, mountain biking, yoga, meditation.

References

Jean-Baptiste Durand, Assistant Professor at Grenoble INP, jean-baptiste.durand@univ-grenoble-alpes.fr
Anne Guérin-Dugué, Professor at Université Grenoble Alpes, Grenoble, anne.guerin@gipsa-lab.grenoble-inp.fr