

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 Discovery 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.

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. Pedagogy 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