GUILLAUME AUSSET

guillaume@ausset.me

I am a data scientist at Younited Credit, where I create products that rely on machine learning to enable business teams and facilitate the growth of the company. My academic work focuses on transposing common results from the machine learning literature to the setting of survival analysis, and developing novel predictive techniques for censored data.

SKILLS

Lang. French (native) English (fluent)

Prog. **Python** (10+ years) **Julia** (5+ years)

Tools Linux (20+ years) System administration (Proxmox, clustering) Networking (AS)

EDUCATION

2018-2021 **Télécom Paris** PhD on Survival Analysis.

My work focused on adapting the standard results and techniques from the field of machine learning to the survival analysis setting applied to credit rating and medicine.

Supervisors: Stéphan Clémençon and François Portier

2019 RLSS

Summer school on Reinforcement Learning with the SequeL team.

2016–2017 École Normale Supérieure MSc (MASH)

Mathematics, Statistics and Machine Learning.

Convex Optimization, Kernel Methods, Probabilistic Graphical Models, MCMC, Statistical Learning, etc.

2014-2015 **ENSAE** MSc (MASEF)

Stochastic calculus and stochastic control for finance, probability and measure theory, ordinary differential equations etc.

WORK EXPERIENCE

2022- Younited Credit

Reviewed all models as part of the Model Risk Management team. Led the development of new models for the French and Spanish markets. Led the automatic income analysis project for the Italian market.

2017-2021 BNP Paribas

Applied machine learning to credit ratings analysis. Developed a Bayesian portfolio optimization framework.

2016 Natixis

Worked on AMeRisc, a large legacy risk aggregation platform using Java, C++, and Perl.

2015 Crédit Agricole

Research internship on supervised learning for scoring.

2014 CEREMADE

Research internship on RKHS and Wassertein, under Julien Salomon.

PUBLICATIONS

- **G. Ausset**, T. Ciffréo, S. Clémençon, F. Portier and T. Papin. Individual Survival Curves with Conditional Normalizing Flows. *IEEE DSAA*'2021.
- **G. Ausset**, S. Clémençon and F. Portier. Nearest neighbour based estimates of gradients: Sharp nonasymptotic bounds and applications. *AISTATS*, 2021.
- **G. Ausset**, S. Clémençon and F. Portier. Empirical Risk Minimization under Random Censorship: Theory and Practice *JMLR*, 2019.

TALKS & CONFERENCES

2019 **CMStatistics**, London

Machine Learning for Survival Analysis: Empirical Risk Minimization for Censored Distribution-Free Regression with Applications to Healthcare and Finance. *Talk*.

2018 NeurIPS ML4H, Vancouver

Machine Learning for Survival Analysis: Empirical Risk Minimization for Censored Distribution-Free Regression with Applications. ML for Health Workshop, *Poster*.

Awards & Scholarships

2017 **IESF Challenge Data Science**, 1st Bee-o-diversity

Classifying species of pollinating insects. Cash prize.

2017 ENS Data Challenge, 1st RYTHM (now Dreem) Challenge

Predicting the age of patients from EEGs.

2016 Natixis Foundation for Quantitative Research Best Memoir

Best Memoir in Quantitative Finance for Ensemble of Trees: Theory and Application to Scoring