GUILLAUME AUSSET

Address: 92130 Issy-les-Moulineaux — France

EMAIL: guillaume@ausset.me

PGP: 82E707B0D7283273CB9D53969596671D5E50863D

web: 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.

I had the opportunity to apply my work to both the medical setting (prediction of *death*) and the financial setting (prediction of *default*) but developed more general techniques that can be applied in any setting involving a *time-to-event*. My contributions can be found on sr.ht/~aussetg and github.com/aussetg.

SKILLS

Lang. French (native) English (fluent)

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

Tools Linux (20+ years) System administration (Proxmox, clustering) Net-

working (AS) FreeBSD Solaris

Misc. Git, L'TeX and many other tools

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, mostly 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,

Monte Carlo Markov Chains, 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

2025- Younited Credit

Joined the new Data Science team. Updated the value-based bidding model and led the automatic granting project for Italy.

2023-2024 Younited Credit

Joined the Data Science and Credit Scoring team, creating a new French model with survival analysis for both short and long credits, and updating the Spanish model to achieve profitability.

2022-2023 Younited Credit

Reviewed all current models as a Model Risk Manager and helped introduce best practices from industry and academia.

2017-2021 BNP Paribas

Applied machine learning to credit ratings analysis. Developed a Bayesian portfolio optimization framework. Participated in most of the nascent data science projects at Portfolio Management.

2016 Natixis

I worked on AMeRisc, a large legacy risk aggregation platform for Natixis, using Java, C++, and Perl.

2015 Crédit Agricole

Research internship on supervised learning for scoring with ensembles of random trees.

2014 CEREMADE

Research internship under the supervision of Julien Salomon, on Reproducing Kernels, the Wassertein metric and SVMs.

PUBLICATIONS

- G. Ausset, T. Ciffréo, S. Clémençon, F. Portier and T. Papin. Individual Survival Curves with Conditional Normalizing Flows. 8th IEEE International Conference on Data Science and Advanced Analytics (IEEE DSAA'2021).
- G. Ausset, S. Clémençon and F. Portier. Nearest neighbour based estimates of gradients: Sharp nonasymptotic bounds and applications. Proceedings of The 24th International Conference on Artificial Intelligence and Statistics, PMLR 130:532-540, 2021.
- 2019 **G. Ausset**, S. Clémençon and F. Portier. Empirical Risk Minimization under Random Censorship: Theory and Practice *Journal of Machine Learning Research*, *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. Machine Learning for Health (ML4H) 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.
- Natixis Foundation for Quantitative Research Best Memoir
 Prize for the Best Master Memoir in Quantitative Finance for Ensemble
 of Trees: Theory and Application to Scoring