Auguste Baum

MSc graduate in Data Science at EPFL

 augustebaum
 +33 6 42 89 41 43
 auguste.baum@pm.me

Experience

July 2023— Oct. 2023
Participant in Summer of Nix 2023, *NixOS Foundation, Paris (remote)*
- Developed Nix package and module for open-source projects, of which Pretalx and Rosenpass.
- Experienced mob programming, a low-latency work technique enabling fast skill improvement.

Sept. 2022— March 2023
AI research intern, *Swisscom Digital Lab, Lausanne*
- Conducted a research project on explainability of neural networks for big-data tabular datasets.
- Developed reproducible research pipeline system using pytask.

2021—2022
Co-founder & CTO, *Resilio, Lausanne*
Built the backend of Resilio Tech, an LCA tool for digital sobriety consultancy, in Django.

2020—2021
Digital Sobriety consultant, *Zero Emission Group, EPFL, Lausanne*
- Developed automatic PowerPoint pipeline in Python, speeding up the auditing process by 30%.
- Co-authored reports on environmental impact of digital technology in multinational companies.

Education

2020—2023
MSc Data Science, *EPFL, Lausanne*
ML, information security and big data methods. MSc thesis on Explainable AI.

2017—2020
BSc Mathematics & Statistics and Physical Chemistry, *UCL, London*
First class Honours. Dissertation on Machine Learning for chemical property prediction.

2016—2017
Classe préparatoire, *Lycée Saint-Louis, Paris*
Admitted in PC*. Foundations of Physics, Chemistry, Mathematics and Computer science.

Projects

2022—2023
MSc project: "Path regularization for continuous counterfactual explanations", *Swisscom & EPFL, Lausanne*
Developed a novel generative model regularization technique to produce high-quality explanations of deep neural network predictions. Supervised by Prof. Pascal Frossard and Dr Daniel Dobos.

2021
Machine learning project: "Automatic detection of available area for rooftop solar panel installations", *EPFL, Lausanne*
Built a neural network model to detect the empty space on rooftops in satellite images.

2020
BSc project: "Machine Learning methods for Property Prediction", *UCL, London*
Reviewed recent approaches to chemical property prediction with machine learning.

Languages

English and French (native), Spanish (B2), Japanese (basic)

Technical Skills

Functional programming	Haskell Scala		Object-oriented programming	Python Java
ML / Data	PyTorch		Big data	Spark
Software development	Git		Scientific computing	Matlab Mathematica Sage

Web development   HTML/CSS   Django   Miscellaneous   Nix   Vim

(Last updated: 2023-10-26)