Felix Klingelhoefer

Curriculum Vitae



Education

2011–2014 **Baccalauréat Scientifique**, LYCÉE AMIRAL RONARC'H, *Brest*. With honors ("Very Good")

2014–2016 Classes Préparatoires aux Grandes Écoles (preparatory classes MPSI->MP*), LYCÉE FRANÇOIS RENÉ DE CHATEAUBRIAND, Rennes.

2016–2020 Bachelor's and Master's degree in fundamental Computer Science, ÉCOLE NORMALE SUPÉRIEURE DE LYON, *Lyon*.

With honors ("Very Good")

2020–2023 PhD, GSCOP (UNIVERSITÉ GRENOBLE ALPES), Grenoble.

Supervised by Alantha Newman and Louis Esperet, on the topic of efficient algorithms to find stable sets and colorings in graphs with certain structure.

Skills

Algorithmics Machine Learning, Parallel Algorithms, Quantum Algorithms, Graph Theory, Complexity

Programming Python, C/C++, OCAML, LATEX, SQL

Machine learning Tensorflow, Scikit-Learn, Keras, Pytorch

Professional experience

2017 (6 weeks) Research internship in Machine Learning, Institut Mines-Télécom Atlantique, Brest.

Designed a neural network for MRI modality transformation, supervised by François Rousseau.

2018 (3 months) Research internship in Quantum Algorithmics, Centre for Quantum Technologies, Singapore.

Studied quantum walks relating to quantum learning theory as well as quantum algorithms and complexity under the direction of Miklos Santha and Rahul Jain.

 $2018-2019 \; \text{(4 Research internship in Machine Learning, L_{ABORATOIRE HUBERT CURIEN}, \textit{Saint-Etienne}.$

months) Combined the SMOTE algorithm for imbalanced data problems with metric learning techniques, overseen by Marc Sebban.

2019 (5 months) **R&D** internship in Machine Learning, WORLDLINE, Lille.

Developed a novel transfer learning method for fraud detection based on random forests, overseen by Li Guo.

2020 (5 months) Research internship in Algorithmics, University of Neuchâtel, Neuchâtel, Switzerland. Implemented highly scalable phase-fair reader-writer locks, supervised by Pascal Felber.

Languages

French Mother tongue

English Fluent

German Fluent

American nationality, C2 certification from the CAE German nationality, raised in a German-speaking family