Axel Kerinec

47 rue Marx Dormoy,
75018 Paris
France
M +33 623 023 962
E kerinec@lipn.univ-paris13.fr

Research Experience

PhD, LIPN. **09/2019-05/2023**
Call-by-Value λ-calculus.
Supervised by Giulio Manzonetto

Internship, I2M. **03/2019-08/2019**
Algebraic λ-calculus.
Supervised by Lionel Vaux Auclair

Internship, University of Bologna. **10/2018-03/2019**
Probabilistic λ-calculus.
Supervised by Ugo Dal Lago

Internship, IRIF. **02/2018-06/2018**
Taylor expansion of λ-terms in Call-by-Value λ-calculus.
Supervised by Michele Pagani and Giulio Manzonetto

Internship, University of Copenhagen. **Summer 2017**
Investigating when multi-task learning works for documents classification tasks.
Supervised by Anders Søgaard

School Project, *Dicotomix Project*. **09/2016-05/2017**
Improving writing speed of classical spellers for disabled people.
Working with hospital Pierre-Wertheimer Lyon

Internship, Ecole Telecom Bretagne. **Summer 2016**
Improving Support Vector Machines method with the graph Fourier transform.
Supervised by Vincent Gripon

Teaching Experience

Computer Science Department DUT Villetaneuse. **2021-2022**
Introduction to Operating Systems; Advance Databases

Computer Science Department DUT Villetaneuse. **2020-2021**
Introduction to Algorithm and Programming; Python; Architecture and Programming

Computer Science Department DUT Villetaneuse. **2019-2020**
Data Communication Network; Data Structures and Fundamental Algorithms; Architecture and Programming

Author, H&K publisher. **05/2018**
Redaction of a corrected version of 'grandes ecoles' entrance exam for H&K publisher.

Publications

Why Are Proofs Relevant in Proof-Relevant Models?, *A. Kerinec, G. Manzonetto and F. Olimpieri*, Symposium on Principles of Programming Languages (POPL 2023).

Call-By-Value, Again!, *A. Kerinec, G. Manzonetto and S. Ronchi Della Rocca*, International Conference on Formal Structures for Computation and Deduction (FSCD 2021).

Revisiting Call-by-value Bohm trees in light of their Taylor expansion, *A. Kerinec, G. Manzonetto and M. Pagani*, Logical Methods in Computer Science (LMCS 2020).

When does deep multi-task learning work for loosely related document classification tasks?, *A. Kerinec, C. Braud and A. Søgaard*, Proceedings of the 2018 EMNLP Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP.

Education

Master, *Ecole Normale Superieure de Lyon*, *Computer Science*. **2017-2018**
Automata, Coinduction, and Relational Algebra;
Monadic Second Order Logic, Automata, Expressivity and Decidability;
Implicit Computational Complexity;
Models of Concurrency, Categories, and Games;
Complex Networks;
Lower Bound Methods;
Graph Decompositions: From Tree-Width to Perfect Graphs

Master, *Ecole Normale Superieure de Lyon*, *Computer Science*. **2016-2017**
Parallel and Distributed Algorithms;
Information Theory;
Optimisation and Approximation;
Performance Evaluation of Networks;
Semantics and Verification;
Programs and Proofs;
Data Bases and Data Mining;
Computational Complexity;
Machine Learning

License, *Ecole Normale Superieure de Lyon*, *Computer Science*. **2015-2016**
Language theory;
Turing Machines and Automatons;
Mathematical Logic;
Probability;
Computer and Network Architecture;
Algorithm Design/Complexity/Implementation

Preparatory School, *Centre International de Valbonne (Two years intensive courses preparing the competitive entrance exam to French 'Grandes Ecoles')*. **2013-2015**
Mathematic, Computer Science, Physic

Scientific Baccalaureat, *(French secondary school diploma)*, *Honors*. **2013**
Mathematic, Physic, Engineering

Languages

French: Native

English: Fluent (CAE level C1)

German: Intermediate (a few years ago level C2)

C++: Intermediate

SQL: Fluent

Python: Fluent

OCaml: Intermediate

HTML: Intermediate

Other Interests

I enjoy a lot self-expression: dance, make-ups, drawings (I used to perform as a drag-queen). I am also into combat sports.