Clémence Réda

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Education and qualifications

Faculty of Mathematics, Informatics and Mechanics (University of Warsaw) **Poland**
Internship *2017 – 2018*
Ten-month-long internship in research, included in the curriculum of ENS Paris-Saclay (former Ecole Normale Supérieure* de Cachan).

ENS Paris-Saclay (former Ecole Normale Supérieure* de Cachan) **France**
Masters *2016 – 2017*
First year of Masters diploma in Computer Science, majoring in Bioinformatics, Randomized Algorithms, Convex Optimization, Computer Vision, Machine Learning, Networks, Biology.

Ecole Normale Supérieure de Cachan and Université Paris Diderot **France**
Bachelor's degree *2015 – 2016*
Bachelor's degree in Computer Science, majoring in Algorithmics, Formal Langages, Programmation, Logics, Architecture and Systems, Computability, Complexity, Databases, Lambda-Calculus, Discrete Mathematics.

Lycée Louis-le-Grand, Paris **France**
*Classe préparatoire aux grandes écoles*** *2013 – 2015*
Majoring in Mathematics, Computer Science and Physics.

Lycée Albert Einstein, Bagnols-sur-Cèze **France**
*Baccalauréat S-Mathématiques**** *2013*
Majoring in Mathematics.

* An *Ecole Normale Supérieure* is a school especially aimed at training future teachers and researchers.
* A *classe préparatoire* is a prep course to train undergraduate students for enrollment in highly-selective French colleges. It is considered equivalent to the first two years of a Bachelor's degree.
** The *baccalauréat* is the French equivalent of a final highschool-leaving/A-level examination.

Conferences

BIT'18 and Workshop 6 of ECCB'18
(talk) *June & September 2018*
C. Réda & B. Wilczyński. **Automated Inference of Gene Regulatory Networks Using Explicit Regulatory Modules**.

Internships and projects

Regulomics Team, Dr. B. Wilczyński **Warsaw, Poland**
Internship in Bioinformatics, 10 months *2018*
Theoretical work to include explicit specific biological connections in gene regulatory networks, and study their influence on inference and simulation of such biological models.

Genomics and Regulatory Systems Unit, Dr. N. Luscombe and Dr. G. Ilsley **Okinawa, Japan**
Internship in Bioinformatics, 5 months *Early 2017*

Implementation in R of an application for single-cell RNA-sequencing data analysis, design and implementation of a novel algorithm for cell clustering.

Group project in C++
Design and implementation of a novel recommender system. *Late 2016*

CBiB team, supervised by Dr. M. Nikolski and M. Raffinot **Bordeaux, France**
Internship in Bioinformatics, 2 months *Summer 2016*
Compared analysis of taxonomic trees: improvement of the analysis of metagenomic data in medical studies: *TaxoTree*, *TaxoCluster*, *TaxoClassifier* softwares in Python.

Group class project in Scala
Implementation of a Tower Defense game. *2016*

Class project in OCaml
Implementation of a parser-lexer with yacc. *2016*

Programming class project in OCaml
Implementation of a simplified-C compiler. *Late 2015*

With the help of the INSERM of Montpellier, France **Paris, France**
Project for the classe préparatoire *2013 – 2015*
Design and implementation in Python of a model of the evolution of tumoral cells in breast cancer, using circulating tumor DNA.

Skills

Programming languages

OCaml, Javascript/Typescript, R, Python 2: Used for several projects, at advanced levels.

Python 3, Scala, Matlab: Used for several projects, particularly in bioinformatics.

LaTeX, TeX, Beamer: Widely-used for reports and defences.

Other self-taught languages/frameworks:: Django, Jekyll, HTML/CSS, PHP, SQL, Bash, C, Intel x86 Assembly, Haskell.

Databases

MySQL, MongoDB, NeDB:

Operating Systems

Windows (up to 10), Linux (Debian, CentOS, Ubuntu), Mac.:

Softwares

Adobe Photoshop and Photoshop-like softwares, Microsoft Office, Open Office.:

Language proficiency

French: C2 *Native speaker.*

English: C1 *TOEFL score (in 2016): 643/677.*

Spanish: B1 *Intermediate level, studied at school for seven years.*

Arabic: A1 *Basic level, self-taught language.*

Miscellaneous

Porto (Portugal)
Team wons 27th place out of 60 in the SWERC 2016 contest. *November 2016*

Paris (France)

Attended prep courses for the ACM contest. *2015 – 2016*

Paris (France)

Attended Django Girls event.
Django Girls events are meant to teach bases of web programming. *April 2016*

Geneva (Switzerland)

Attended the MASTERCLASS of Physics at the CERN. *2013*

Nîmes (France)

Won the Issoire writing prize.
The *Issoire* prize is a French regional writing contest. *2011*