

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 Languages, Programming, 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.

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. Ilesley **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.

Experience

Team wins 27th place out of 60 in the SWERC 2016 contest.

Porto (Portugal)

November 2016

Attended prep courses for the ACM contest.

Paris (France)

2015 – 2016

Attended Django Girls event.

Paris (France)

Django Girls events are meant to teach bases of web programming.

April 2016

Attended the MASTERCLASS of Physics at the CERN.

Geneva (Switzerland)

2013

Won the Issoire writing prize.

Nîmes (France)

The *Issoire* prize is a French regional writing contest.

2011