Curriculum Vitae

Clémence Réda

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Education and qualifications

2018 – present   **Masters MVA**, *ENS Paris-Saclay (former Ecole Normale Supérieure* de Cachan)*.
Second year of *Master Vision, Apprentissage (MVA)* diploma in Mathematics and Computer Science. **Subjects:** Biostatistics, Deep Learning, Game Theory, Graphs in Machine Learning, Mathematical Methods for Imaging, Modelling in Neurosciences, Object Recognition and Computer Vision, Predictions of Individual Sequences, Probabilistic Graphical Models, Reinforcement Learning, Topological Data Analysis.

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

2016 – 2017   **Masters MPRI**, *ENS Paris-Saclay (former Ecole Normale Supérieure* de Cachan)*.
First year of *Master Parisien de Recherche en Informatique (MPRI)* diploma in Computer Science. **Subjects**: Bioinformatics, Biology, Computer Vision, Convex Optimization, Machine Learning, Networks, Randomized Algorithms.

2015 – 2016   **Bachelors**, *Ecole Normale Supérieure de Cachan and Université Paris Diderot*.
Bachelors degree in Computer Science. **Subjects**: Algorithmics 101, Complexity/Computability, Databases, Discrete Mathematics, Formal Langages 101, Lambda-Calculus 101, Logics 101, Programmation, Systems.

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

2013   ***Baccalauréat S-Mathématiques******, *Lycée Albert Einstein, Bagnols-sur-Cèze*.
Majoring in Mathematics and Biology (S-SVT-Math).

*   *An **Ecole Normale Supérieure** is an elite school focused on theoretical research.*

*   *A **classe préparatoire** is a prep course to train undergraduate students for enrollment in highly-selective French colleges.*

**   *The **baccalauréat** is the French equivalent of a final highschool-leaving/A-level examination.*

References

Dr. Bartek Wilczyński   **Head of team Regulomics**.
Faculty of Mathematics, Informatics and Mechanics (MIM UW) in Warsaw, Poland.

Dr. Nicholas Luscombe   **Head of the Bioinformatics and Computational Biology Laboratory in the Francis Crick Institute and of the Genomics and Regulatory Systems Unit in the OIST**.
Francis Crick Institute in London, United Kingdom, and Okinawa Institute of Science and Technology (OIST), in Onna, Japan.

Dr. Macha Nikolski   **Head of the Bordeaux Bioinformatics Center CBiB**.
Member of **MABioVis** team in LaBRI in Bordeaux, France.

Conferences

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

Professional Experience

Internships

2017 – 2018 **Internship in Bioinformatics**, *Regulomics, supervised by Dr. B. Wilczyński*, Warsaw, Poland, 10 months.
Theoretical work to include explicit specific biological connections in gene regulatory networks, and study their influence on inference and simulation of such biological models.

2017 **Internship in Bioinformatics**, *Genomics and Regulatory Systems Unit, supervised by Dr. N. Luscombe and Dr. G. Ilsley*, Onna-son, Japan, 5 months.
Implementation in R of an application for single-cell RNA-sequencing data analysis, design and implementation of a novel algorithm for cell clustering.

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

Skills

Operating Systems

Windows (up to 10), Linux (Debian 7 and 8, CentOS 6/7, Ubuntu, Kali, ...), Mac. Virtual machines (VirtualBox).

Programming languages

Intensively used	R, Python 2 and 3, Matlab/Octave, Bash.
Fluent	OCaml, Javascript/Typescript.
Knowledge	C/C++, PHP, Haskell, Assembler x86.
Reports, defences	LaTeX/Beamer, PowerPoint/Microsoft Word.

Web Programming

Frameworks	Django, Jekyll/Hexo, R Shiny.
Languages	HTML/CSS5.

Databases

MySQL, MongoDB, NeDB.

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.*