



Ghislain FIEVET

Bioinformatic - Data Scientist - fullstack - AWS

20+ years of coding

Winner of the IEEE BigData Streaming 2019

<https://static.aminer.cn/misc/pdf/BigData2019/S06208.pdf>

ghislain.fievet@gmail.com

06 17 45 02 76

EXPERIENCE

Cerbrain, Paris — Founder, dev fullstack react.js/python - AWS

December 2020 - now

Creation of a e-learning social network.

react.js - python - AWS S3, AWS EC2, AWS Lambda, AWS RDS, AWS Rekognition - flask - redux - terraform - ansible

craft ai, Paris — Data Scientist

August 2019 - November 2020

Case study and integration of various data science use cases:

- forecast/anomaly detection and optimization of energy network
- recommendation engine
- anomaly detection in computer network
- predictive maintenance
- smart UI

Education Nationale, Grand EST — Math Teacher

2017 - 2019 - 2 years

- development of a classroom manager tool
- development of a pipeline to create personalized math exercises, based on a graph of knowledge

INRA, Jouy-en-Josas — Engineer in bioinformatic

2015 - 2016 - 10 months

- Work on data from UniProt, EPD, and Expasy databases
- Mission of development in PERL and PostgreSQL in a R&D context.
- Use of the ontology Protegez software
- Inside the IMSV project, simulation of a bacteria from a mathematics simulator, public biology data and a biology ontology.

LANGUAGES

French native speaker

English fluent, Bullats C1

INRA, Toulouse — *Engineer in bioinformatic*

2013 - 2015 - 2 years

NGS in a project aiming to create new varieties of sunflowers.

- Use of alignment softwares: BWA, BOWTIE and GLINT
- Work on DNA and RNAseq data
- Work with fastq, sam, bam, vcf files and related softwares
- NGS analysis: analysis on genomic/proteomic data, BWA, BOWTIE, Galaxy
- SNP detection and selection: optimization problem to select genetic mutations considering a set of constraints.
- design of SNP Affymetrix microarray chips

Ecole Polytechnique, Palaiseau — *Engineer in bioinformatic*

March 2012 - August 2012 - 6 months

Inside the Bioinformatic team of the LIX, Laboratory of Informatics of the X, Palaiseau. Creation of KGMLReaderExtention, edition and visualization plugin of metabolic network for Cytoscape.

- exports from Kegg database
- modelisation by ODE and simulation of metabolic networks.
- implementation in a plugin for Cytoscape, graph visualization software.
- java, scilab, matlab.

LRI, Saclay — *Engineer in bioinformatic*

June 2011 - August 2011 - 3 months

R&D on ENSEMBLE methods on classification algorithms to convert terms from an ontology to another.

- algorithms optimization for functional annotation
- java, python, weka, scilab
- work with ontologies from public biology databases
- frequent use of the Blast tools serie

EDUCATION

OpenClassroom — *Data Scientist formation*

2019

I followed this formation to update my knowledge on the new available tools.

Université de Lorraine, Nancy — *Master in Mathematics education*

2016 - 2018

Université Paris Sud (Paris XI) and Ecole Polytechnique, Orsay/Palaiseau — *Master in bioinformatic and biostatistics*

2010 - 2012

BIOINFORMATIC SKILLS

- Python, Perl
- Software/Pipeline development
- Scilab
- SQL databases
- Use of alignment softwares: BWA, BOWTIE and GLINT
- Work on DNA and RNAseq data
- Blast tools
- Work with fastq, sam, bam, vcf files and related softwares
- Cytoscape, Protegez
- Data science
- Work on data from UniProt, EPD, Expasy, Kegg biology databases

PUBLICATIONS

2019

[Real-time machine learning competition on data streams at the IEEE big data 2019](#)

D Boulegane, N Radulovic, A Bifet, G Fievet, J Sohn, Y Nam, S Yu, ...
2019 IEEE International Conference on Big Data (Big Data), 3493-3497

2018

[Comparison of GWAS models to identify non-additive genetic control of flowering time in sunflower hybrids](#)

F Bonnafe, G Fievet, N Blanchet, MC Boniface, S Carrère, J Gouzy, ...
Theoretical and applied genetics 131 (2), 319-332

2017

[The sunflower genome provides insights into oil metabolism, flowering and Asterid evolution](#)

H Badouin, J Gouzy, CJ Grassa, F Murat, SE Staton, L Cottret, ...
Nature 546 (7656), 148-152

2016

[Représentation systémique multi-échelle des processus biologiques de la bactérie](#)

V Henry, A Ferré, C Froidevaux, A Goelzer, V Fromion, S Cohen-Boulakia, ...
IC2016-Ingénierie des Connaissances

HOBBIES

- Web development
- Educational tools
- Sport

