✉ jeanpatrick.francoia@gmail.com
Personal page: jpfrancoia.github.io
JPFrancoia
Nationality: French; Age: 28
H-index: 4

Jean-Patrick Francoïa

Professionnal experience, teaching activities

2018–Today **Data engineer**, *Okra Technologies*, Netherlands.
Artificial intelligence analytics engines for healthcare

2017–2018 **Postdoctoral research assistant**, *University of Glasgow*, Scotland.
3D printing applied to chemistry
Supervisor: Prof. Leroy Cronin (lee.cronin@glasgow.ac.uk)

2013–2016 **Teaching assistant**, *Université de Montpellier*, France.
Laboratories in organic and general chemistry for undergraduate students (*ca.* 200 hours)

Nov. 2014 **Direct mentor**, *Université de Montpellier*, France.
Supervision of a master student for 5 weeks

2012–2013 **Training period**, *Lund University*, Sweden.
Organic synthesis, catalysis
Supervisor: Prof. Kenneth Wärnmark (Kenneth.Warnmark@chem.lu.se)

Apr. 2010–June 2010 **Training period**, *University of Whitewater*, Wisconsin, United States.
Organic synthesis, chemical biology
Supervisor: Prof. Catherine Chan (chanc@uww.edu)

Education

2013–2016 **Ph. D. in chemistry**, *Université de Montpellier*, France.
Supramolecular chemistry, biological chemistry, sensors
Supervisor: Dr Laurent Vial (laurent.vial@univ-lyon1.fr)

2012–2013 **Master in chemistry, with honours**, *Lund University*, Sweden.

Chemistry skills

Synthesis	SPPS, multistep organic synthesis
Analysis	Fluoresence spectroscopy, HPLC, NMR, ICP-OES
Modeling	Amber, Gaussian, Spartan, VMD
Microbiology	Culture of bacteria and model plants
Other	3D printing, CAD (Onshape, OpenSCAD), electronics (Arduino)

Computer skills

- Developer of ChemBrows (400+ users): www.chembrows.com
- Deep knowledge of Python: PyQt (GUI), numpy, scipy, matplotlib, scikit-learn, pandas, Flask, SQLAlchemy, mypy, etc
- Deep knowledge of SQL, Bash, LaTex
- Experience with non linear regression. Good knowledge of machine learning algorithms: PCA, LDA, Naive Bayes, SVM
- Basis with HTML, CSS, C/C++ and PHP
- Beginner with Rust
- Contributor to open-source projects (scikit-learn, Cura, etc)
- Daily usage of git (github, gitlab)
- Daily usage of GNU/Linux (Archlinux and Debian-based distributions)

Selected Publications

Full publication list available at https://jpfrancoia.github.io/publications

- **Digitization of multistep organic synthesis in reactionware for on-demand pharmaceuticals** P. J. Kitson, G. Marie, J.-P. Francoia, S. S. Zalesskiy, R. C. Sigerson, J. S. Mathieson and L. Cronin, *Science*, 2018, **359**, 314 - citation : 31
- **Digitizing Poly-*L*-Lysine Dendrigrafts: from Experimental Data to Molecular Dynamics Simulations** J.-P. Francoia, J.-C Rossi, G. Monard and L. Vial, *J. Chem. Inf. Model.*, 2017, **57**, 2173 - citations : 4
- **ChemBrows: An Open-Source Application Software To Keep Up to Date with the Current Literature** J.-P. Francoia and L. Vial, *J. Chem. Educ*, 2016, **93**, 1137 - open access, citation : 1
- **Monitoring Clinical Levels of Heparin in Human Blood Samples with an Indicator-Displacement Assay** J.-P. Francoia, R. Pascal, and L. Vial, *Chem. Commun.*, 2015, **51**, 1953 - citations : 13

Conferences

Slides and posters available at https://github.com/JPFrancoia/PostersSlides

8. **Welcome Genome Campus Hackathon 2018**, *Hinxton, United Kingdom*.
   Medicine Discovery Catapult's challenge:
   How can we combine drug and genetic data to intelligently prescribe drugs?
7. **RSC Twitter Poster Conference 2018**, *Twitter, World*.
   Poster presentation
6. **JMJC 2016 (Journées Méditerranéennes des Jeunes Chercheurs)**, *Nice, France*.
   Poster presentation
5. **MSMLG 2016 (Molecular Sensors and Molecular Logic Gates)**, *Bath, United Kingdom*.
   Oral presentation and poster presentation
4. **JMJC 2015 (Journées Méditerranéennes des Jeunes Chercheurs)**, *Montpellier, France*.
   Oral presentation
3. **MeMoSim 2015 (Modeling Methods and multiscale Simulations)**, *Lyon, France*.
   Poster presentation
2. **Balard Chemistry Conferences 2014**, *La Grande Motte, France*.
   Poster presentation
1. **JJC 2014 (Journées des Jeunes Chercheurs)**, *Montpellier, France*.
   Poster presentation

Hobbies

Martial arts.
Kyokushinkai karate, brazilian jiu-jitsu, Muay-thaï, Krav-maga, Sambo, Tae Kwon do

Salsa.
Cuban and L.A. style

D.I.Y (Do It Yourself).
3D printing (owner of a 3D printer), microelectronics