

# Vincent Emonet

Knowledge graph developer

## Experiences

- Since **Data science developer**,  
July 2018 *Institute of Data Science*, Maastricht University, Netherlands.
- Development of Data2Services, a framework to generate services out of structured data using semantically meaningful data model (Docker, Java): [github.com/MaastrichtU-IDS/data2services-ecosystem](https://github.com/MaastrichtU-IDS/data2services-ecosystem)
  - Conversion of structured data, such as DrugBank and HGNC, to RDF to solve biomedical questions using SPARQL.
  - Work on data representation and services generation to solve complex biomedical questions for the NCATS Biomedical Data Translator program
  - Build RDF knowledge graphs to perform graph embeddings (bio2vec project)
  - Published *Data2Services: enabling automated conversion of data to services* at SWAT4LS
- October 2017 **Conversational design engineer**,  
to *Match Group*, France.
- June 2018
- Involved in the development of a Natural Language Understanding (NLU) tool to build chatbots
  - Designed conversational patterns using API.ai framework
  - Analyzed conversations flow using tools like Google Analytics
  - Managed the multilingual aspect and translations in 6 languages of the NLU tool developed
  - Won the French 2018 Digital Innovation Award
- January 2015 **Computer science design engineer - Ontologies & Semantic Web**,  
to *CNRS - Laboratory of Informatics, Robotics and Microelectronics of Montpellier*, France.
- July 2017
- Administration and new features development on [bioportal.lirmm.fr](http://bioportal.lirmm.fr) and [agroportal.lirmm.fr](http://agroportal.lirmm.fr) platforms, used for ontology storage, exploration and text annotation (Ruby on Rails & Java): [github.com/sifrproject](https://github.com/sifrproject)
  - Kept compatibility with main version of the NCBO BioPortal (tests)
  - Packaged, integrated and documented Natural Language Processing programs, available at [advanse.lirmm.fr](http://advanse.lirmm.fr) (Java, AngularJS, Linux administration): [gite.lirmm.fr/advanse](http://gite.lirmm.fr/advanse)
  - Enhanced and packaged the YAM++ ontologies matching tool (Java): [gite.lirmm.fr/opendata](http://gite.lirmm.fr/opendata)
  - Developed a web interface for ontologies mappings validation (JEE) : [yamplusplus.lirmm.fr](http://yamplusplus.lirmm.fr)
- March 2014 **Bioinformatics design engineer - Biomedical data processing**,  
to September 2014 *Université de Laval*, Québec, Canada.
- 2014
- Development of web services to access biomedical data in the RDF format for the *bio2rdf.org* project: [github.com/bio2rdf/bio2rdf-rest](https://github.com/bio2rdf/bio2rdf-rest)
- & June 2013
- Developed components for the Talend ETL for the Semantic Web (Java): [github.com/vemonet/talend4sw](https://github.com/vemonet/talend4sw)
- to September 2013
- Converting biomedical databases to RDF format (PubMed, neXtProt) using Talend ETL and Java
  - Set up a Hortonworks Hadoop platform for Big Data
- June 2012 **Intern in bioinformatics in an ecology research laboratory**,  
to *University of California*, Berkeley, USA.
- August 2012
- Developed DNA sequence analysis programs using Python 2.7
  - Set up an Amazon Web Service machine image based on Linux

## Education

- 2012 – 2014 **Master degree, Physiology, biotechnology and informatics**, *University of Poitiers, France*, Biotechnology.
- 2011 – 2012 **Bachelor's degree, Bioinformatics**, *University of Poitiers, France*, Biotechnology specialization.
- 2009 – 2011 **Technical College Diploma, Bioengineering**, *Toulon, France*, Biology and biochemistry analysis.

## Publications

- Platforms
- HAL: [https://hal.archives-ouvertes.fr/search/index/q/\\*/authFullName\\_s/Vincent+Emonet](https://hal.archives-ouvertes.fr/search/index/q/*/authFullName_s/Vincent+Emonet)
  - Google Scholar: <https://scholar.google.fr/citations?user=G59f3woAAAAJ>
  - dblp: <http://dblp.uni-trier.de/pers/hd/e/Emonet:Vincent>
- IDS
- V. Emonet, A. Malic, A. Zaveri, A. Grigoriu and M. Dumontier, **Data2Services: enabling automated conversion of data to services**, 2018
  - C. Jonquet et al., **AgroPortal: a vocabulary and ontology repository for agronomy**, *Computers and Electronics in Agriculture*, vol. 144, p. 126-143, 2018

Bio2RDF [○ M. Dumontier, A. Callahan, J. Cruz-Toledo, P. Ansell, V. Emonet, F. Belleau, A. Droit, \*\*Bio2RDF Release 3: A larger, more connected network of Linked Data for the Life Sciences.\*\* \*International Semantic Web Conference\*, 2014](#)

## Skills

Languages Java, Ruby (on Rails), JavaScript, SQL, Python, Shell, LaTeX  
Web SPARQL, RDF, ontologies (OWL, SKOS, OBO, UMLS), RESTful API, Google Analytics, big data (Hadoop), JSON, XML, HTML, CSS  
Tools Git, Docker, Linux, RegEx, Talend ETL, Dialogflow, and Agile methodology  
Biology Notions in biotechnology, genetics, biochemistry and physiology

## Languages

English TOEIC Score 2014: 935. 5 months in the USA. Active participation in discussion, reading and writing documents  
Spanish Basic notions for communication

## References

### Maastricht University

Michel Dumontier,  
Professor of Data Science  
([michel.dumontier@maastrichtuniversity.nl](mailto:michel.dumontier@maastrichtuniversity.nl))

### LIRMM lab

Computer science researchers  
[○ Clément Jonquet](#) ([jonquet@lirmm.fr](mailto:jonquet@lirmm.fr))  
[○ Zohra Bellahsene](#) ([bella@lirmm.fr](mailto:bella@lirmm.fr))  
[○ Jérôme Azé](#) ([jerome.aze@lirmm.fr](mailto:jerome.aze@lirmm.fr))

### Bio2RDF project

François Belleau,  
bio2rdf.org project co-founder  
([francois.belleau@gmail.com](mailto:francois.belleau@gmail.com))