Sergio Peignier

Curriculum Vitae

Formation

2015 **Advanced Lecture Course on Computational Systems Biology**, *COMPSYSBIO spring school*, Aussois, France.

2015–2016 **Second year PhD in Computer Sciences**, *École doctorale Infomath, INSA, INRIA - LIRIS*, Lyon, France.

2014–2015 **First year PhD in Computer Sciences**, *École doctorale Infomath, INSA, INRIA - LIRIS*, Lyon, France.

2013–2014 **Engeneer degree in Bioinformatics and Modeling**, *Institut National de Sciences Appliquées (INSA)*, Lyon, France, Bioinformatics and Modeling.
Jury's congratulations

2013–2014 **Master in Fundamental Computer Sciences**, *École Normale Supérieure*, Lyon, France, Complexe systems specialty.

2012 **Seminar of formal logic and history of formal logic**, *Universidad Catolica Boliviana La Paz*, La Paz, Bolivia.
Certificate of attendance

2008 **First semester of engeneer in Telecommunication**, *Universidad Franz Tamayo*, La Paz, Bolivia.
Wating for courses at INSA de Lyon.

2008 **Bachelor degree**, *Lycée Franco-Bolivien Alcides d'Orbigny*, La Paz, Bolivie, specialty physics.
Jury's congratulations

Work Experience

Lectures

2014–2016 **Lecture of modeling of biological systems**, *modeling and MATLAB*, INSA, Lyon.
Third year department of Bioinformatics and Modeling (BIM) (6 hours)

2014–2016 **Lectures of Computer Sciences**, *Data Bases and SQL*, INSA, Lyon.
Third year department of Bioinformatics and Modeling (BIM) (26 heures)

2014–2016 **Lactures of programing**, *Python*, INSA, Lyon.
Third year department of Bioinformatics and Modeling (BIM) (24 heures)

82 rue du 1er mars 1943, appartement 912 – Villeurbanne 69100
+33 6 48 79 87 46 • sergio.peignier@insa-lyon.fr

2012–2014 **Tutoring sessions**, *Passerelle program*, INSA, Lyon.
Academic support in mathematics and programing for first and second year students at INSA Lyon.

Internship

2016 **Collaboration visit of 8 weeks**, *Faculty of Sciences Universidad Mayor de San Andrés (UMSA)*, La Paz, Collaboration work with Professeur Heriberto Castañeta Maroni.
- Application of Chameleoclust, a subspace clustering algorithm developped during my PhD, to analyse chemical compounds described in a high dimensional space of physical and chemical descriptors.

2014 **6 months internship**, *"Artificial Evolution and Computational Biology" (BEAGLE) team of the french "Institut National de Recherche en Informatique et Automatique" (INRIA) and the laboratory "Laboratoire d'InfoRmatique en Image et Systèmes d'information" (LIRIS)*, Lyon, Suppervised by Guillaume Beslon and Christophe Rigotti.
- Development of a in-silico evolutionary model to study some features of evolution of evolution.
- Development of data mining tasks that take advantage of these features.

2013 **Stage de 4 semaines**, *Faculty of Sciences Universidad Mayor de San Andrés (UMSA)*, La Paz, Suppervised by Heriberto Castañeta.
- Implémentation of a Q-SAR software based on neural networks and genetic algorithms.

2013 **4 months internship**, *"Genetic of Intra-Species Variations" team in the laboratory "Laboratoire de Biologie Moléculaire de la Cellule" (LBMC) ENS*, Lyon, Supervised by Gael Yvert.
- Developpment of a software to detect genetic regions involved in selective advange of yeast populations under selection pressure.
- Analyse of data for Lesaffre company.

2012 **5 weeks internship**, *Faculty of Sciences Universidad Mayor de San Andrés (UMSA)*, La Paz, Suppervised by Heriberto Castañeta.
- Development of an algorithm for RNA secondary structure prediction based on neural networks.
- Short paper published in the "Bolivian Journal of Chemistry".

Computer skills

Basic knowledge: Hardware, HTML, PASCAL

Avancées: Linux, Microsoft Windows, Internet, PYTHON, C, C++, R, MySQL,SQLite, Matlab, Java, LaTeX

Publications

Accepted paper: Peignier, S., and Castañeta, H. (2015). Analysis of subspace clustering of molecules using Chameleoclust, an evolutionary algorith. Revista Boliviana de Química, 32(5), 110-120.

Conférences

Accepted paper: Abernot, J., Beslon, G., Peignier, S. and Rigotti, C.: A commensal architecture for evolving living instruments. In Conference on Computer Simulation of Musical Creativity

Long abstract accepted: Peignier, S., Rigotti, C., and Beslon, G. Subspace Clustering for all Seasons. In EvoEvo Workshop (satellite workshop of ECAL 2015)

Long paper accepted: Peignier, S., Rigotti, C., and Beslon, G. Subspace clustering using evolvable genome structure. In Proceedings of the 2015 on Genetic and Evolutionary Computation Conference (pp. 575-582). ACM.

Séminaires

Présentation	Événement BeyondLab maths-info : EvoEvo (Evolution of Evolution)(2016)
Séminaire	Équipe DM2L: Subspace Clustering Using Evolvable Genome Structure (2016)
Présentation d'un poster	Journée des Thèses du LIRIS: Subspace Clustering Using Evolvable Genome Structure (2016)

Awards

2015 **Best Paper Award**, *Evolutionary Machine Learning*, International ACM conference on Genetic and Evolutionary Computation Conference, Madrid.
GECCO-2015

Language skills

English	**TOEIC**	*Obtained in 2013*
Portuguese	**B1 level**	*Obtained in 2014*
Italian	**B1 level**	*Obtained in 2013*
French	**Mother tongue**	*Bilingual*
Spanish	**Mother tongue**	*Bilingual*

Divers

- **Sciences and Art:** Creation and development of the $Informatique\ Sensorielle$ project. Participation in the 4th RADART meeting (2014).
- **Musique** : Regular practice of guitar and transverse flute. Validation of the first cycle in in the National Music School (Conservatorio Plurinacional de Musica) La Paz Bolivia.
- **Dessin**: Regular practice.
- **Sport**: Regular practice of climbing and running (participation in different runnings and half marathon runnings).
- **Philosophy** : Participation in different lecture of philosophy and epistemology as auditor.