# Vincent ROGER

# **Data Scientist**

□ 1 Rue Saint-Dominique; 31000 Toulouse

website.vincent-roger.fr





# **Skills**

# Data scientist skills.....

- o Decisional system
- o Supervised, non-supervised and semi-supervised learning
- Neural nets
- Generative models
- Clustering
- o Mixture of models
- Signal processing (images and sounds)

# Management skills.....

- Collaborative work
- Respect of due times
- Risk management
- Management Tools

#### Linguistic.....

- French
- English

# Work experience

## PhD, in progress, IRIT

Toulouse, 2018-now

Creating an Automatic System of Inteligibility Measurement (SAMI) to help following-up patients with oral cancer. Project linked to C2SI (Carcinologic Speech Severity Index Project). It involves usage of clinical data and use of recent machine learning algorithms. My supervisors are Julien PINQUIER and Jérôme Farinas from the SAMOVA team.

# Study engineering, two years, LIS

**Toulon**, 2016–2018

Phd stopped before finished. It consisted in learning models adapted to bioacoustic signals. Learned models adapted to classification of 1500 birds. Use of deep neural network and probabilistic model to learn embeddings of cetacean sounds (high dimentionality data).

# Study engineering, teen months, LSIS - TVT Innovation

Toulon, 2015-2016

Model environmental bioacoustics using generative models. I wrote a report on narwhals.

#### Study engineering, internship of five months, IRIT

Toulouse, 2015

Compilation of Temporal Constraint Satisfaction Problem (TCSP) - application in temporal planning. Theoretical analyses and experiments on different representation of temporal languages. Internship done in ADRIA team. Paper published at ICTAI.

#### Junior Software Engineer, internship of four months, LAAS

Toulouse, 2014

Management of movements of humanoids, represent articulation, bodies and position of the robot. Results: modernized tool for task management. Internship done in GEPETTO team.

# Junior Software Engineer, internship of two months, IRIT

Toulouse, 2013

Production of a software for automatic transcription (in real time) of audio-video content (multiple flux). Results: The tools was used for demonstrations of the SAMOVA techniques. Internship done in SAMOVA team.

**Junior Software Engineer**, internship of two months and a half, **CEICOM**Toulouse, 2011

Porting an inter-machine communication tool between applications from Windows to Linux system. Results: porting done with strategic impact.

# **Teaching**

### Machine learning basis, substitute teacher, University of Toulon

**Toulon**, 2018

I teached to master students in software development. It represents 8h of pratical class. I created the courses on simple tasks (mnist and bird sounds) using tensorflow framework and simple neural networks approaches.

# Basic algorithmic, substitute teacher, University of Toulon

**Toulon**, 2017–2018

I teached to bachelor students in engineering sciences. It represents 8h of tutorial class. Proof of algorithms and sorting algorithms.

## Graph theory, substitute teacher, University of Toulon

**Toulon**, 2017-2018

I teached to bachelor students in engineering sciences. It represents 12h of tutorial class and 57h of pratical class. I participated in the redaction of the tutorial and practical classes, it consisted in colored graph and finding best path between edges.

#### **Education**

Phd, Computer Science, Université Paul Sabatier

Toulouse, in progress

Master, Al, Pattern Recognition and Robotics, Paul Sabatier University Toulouse, 2013–2015

License, Fondamental Computer Science, Paul Sabatier University

Toulouse, 2013

Academic and technological diploma, Computer Science, IUT Paul Sabatier Toulouse, 2011

# **Hobbies**

**Sport and health**: Bodybuilding using elastics, running (ran the marathon of Toulouse) and practise of automassages to improve recovery and well being.

Series, films and Manga: I love comics series and movies, but also japanese manga.

Music: I love Australian hip-hop and rap (Hilltop Hoods, Briggs, ...).

Digital drawing: Currently learning digital drawing using graphic tablet.



