Corentin Louboutin

Curriculum Vitæ

Academic background

2012–2015 **Master in computer science**, École Normale Supérieure de Rennes/Université Rennes 1.

Research-oriented school.

Lectures: automata and formal languages, semantics of programing languages, calculability and complexity, logics and formal verification, systems...

2012 **Competitive exam**.

Received at competitive exam of the ENS of Rennes

2012 Competitive exam.

Ranked 10 (out of 8 positions) at the exam to become sound engineer in Conservatoire National Supérieur de Musique et de Danse » (CNSMD) of Paris

2010–2012 **« Classe préparatoire » : mathematics and physics**, *Lycée Chateaubriand*, Rennes.

University-level courses required for competitive entrance to exams into top graduate and engineering schools ($Grandes\ \acute{E}coles$).

Mathematics, physics and computer science

2012 Baccalaureate, Lycée Chateaubriand, Rennes.

With honours

Musical background

- 1999–2012 Classical guitar, « Conservatoire à Rayonnement Régional » (CRR), Rennes. (prof. Hervé Merlin, André Couasnon)
 Mainly classical guitar but also some jazz / improvisation.
 - 2012 **Certificat de Fin d'Étude Musicale de guitare (CFEM)**, *CRR*, Rennes. Degree for amateur players.
 - 2011 **Certificat de Fin d'Étude Musicale de solfège (CFEM)**, *CRR*, Rennes. Good knowledge of classical music (ear, reading and analysing).
- 2009–2012 Harmony, CRR, Rennes.

(prof. David Lamaze)

Bach's chorals, inventions, string quartets.

2003–2007 **Percussion**, *CRR*, Rennes.

(prof. Olivier Fiard)

2001–2007 **« Classe à horaires aménagés musique »**, École élémentaire Contour Saint Aubain, Collège Anne de Bretagne, Rennes.

primary / secondary school with strong musical part

Experience

Summer 2013 Internship (6 weeks), Laboratoire d'Informatique Fondamentale de Lille, France.

Advisor: Mathieu Giraud.

Computed analysis of the development part of sonata forms. (Musical Information Retrieval)

Techniques used: pattern matching (Mongeau-Sankoff algorithm, extensions), key finding (Temperley algorithm, dynamic algorithm), hidden Markov model.

Programming skills

Python Language that I used for my internship.

Ocaml Used for many project as a AI for the *four in raw* game, for semantics computing and smaller projects.

Java Used to implement a real time strategy game in 2D.

C++ Used to implement a ray tracer and smaller project.

C Used for small project and practical works.

Entertainment

Most of my entertainments are related to music. For example, I'm member of the guitar ensemble of the « Orchestre des Jeunes de Haute Bretagne » since ten years. The aim of this orchestra is the partnership with international orchestras. Each year, a travel is organized, for my part I went to several countries, like US, Romania, Czech Republic and China. Since one year, I am also playing electric guitar in a progressive rock band. We are beginning composing our own music.

Moreover, I was a boy scout of the « Scouts et Guides de France » movement during 14 years. During the last two years, I set up and realize, with 3 other persons, a development project in relationship with an association in Mongolia. Our aim was to help an herdsman family to build a shelter for the herd. It was successful, we receive good news every years.