### Simon Bihel

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#### **EDUCATION**

**University of Rennes 1 & ENS Rennes** Rennes, France MSc (2nd yr) in Computer Science, research track [60 ECTS, GPA: 11.569/20, Rank: NA/45] 2017-2018 University of Rennes 1 & ENS Rennes Rennes, France MSc (1st yr) in Computer Science, research track [74 ECTS, GPA: 12.94/20, Rank: 15/18] 2016-2017 **University of Rennes 1 & ENS Rennes** Rennes, France BSc (3rd yr) in Computer Science, research track [66 ECTS, GPA: 10.956/20, Rank: 17/20] 2015-2016 École normale supérieure of Rennes Rennes, France Magistère in Computer Science, research training (lectures, reading sessions, lab visits, group projects) 2015-2018 **University of Caen** Caen, France BSc (1st&2nd yr) in Computer Science [120 ECTS, GPA: 17.79/20, Rank: 1/157]

# EXPERIENCE

**Spruce Systems** Software Engineer

(Remote) London, United-Kingdom

September 2020-Present

2013-2015

Nexmo Software Developer in Test

London, United-Kingdom November 2018–October 2020

- o Voice API: member of the Real-Time Communication stack.
- o Testing: maintenance of the test suite (e.g. abstraction and generation of tests, parallelisation).
- o Monitoring: facilitate incident impact measurement, track API usage, alerting (pushed for on-call).
- o Investigations: understanding test failures or abnormal behaviours across the services.
- o Development: built a rating engine, refactored cluster management, various internal changes in services.
- DevOps: AWS migration, maintenance of on-demand test environments (e.g. dockerise services, debugging).

**KTH** Stockholm, Sweden Research Intern February 2018-June 2018

- o Adaptation of Amplified Unit Tests for Human Comprehension: Generating natural language explanations for Java unit tests generated by DSpot.
- o Supervisors: Benoit Baudry & Martin Monperrus (SCS & TCS Departements)

**KAIST** Daejeon, South-Korea Research Intern March 2017-August 2017

- Automated Test Data Generation for Dynamically Typed Programming Languages: Survey on Test Data Generation from scratch for dynamic languages such as Python.
- o **Supervisor**: Shin Yoo (COINSE Lab)

# University of Rennes 1 & IRISA

Rennes, France

Student (Group project)

September 2016-April 2017

- o Evaluating UPMEM, a low-level parallel Processing-in-Memory architecture, using the k-means algorithm
- o **Supervisor**: Dominique Lavenier (GenScale research group)
- o Presented at HiPEAC'17 Student Heterogeneous Programming Challenge.

**IRISA & INRIA** Rennes, France Research Intern May 2016-July 2016

- o Specifying the Experimental Scenarios for Simulated Cloud Studies: Designing an API for SimGrid, a distributed systems simulator, targeting researchers' needs for cloud simulations.
- o **Supervisors**: Martin Quinson & Anne-Cécile Orgerie (Myriads research group)

# **University of Caen**

Caen, France

Student (Group project)

September 2014-May 2015

- o Building the best ships for the video-game Faster Than Light: Wrote a simulator to automate fights; used Genetic Algorithms and Data Mining.
- o **Supervisor**: Jean-Philippe Métivier

# **SKILLS**

- Languages: Go, Python, Rust, C, C++, Java, Coq, Vimscript, OCaml, Haskell, Scala, SQL
- Libraries: Clang AST, ast.py, CPython, Spoon, WALA slicing, CUDA, MPI, OpenMP, ANTLR3, Xtext, Flex/Bison, NumPy, Hadoop
- Testing: Pytest, \_Unit, Jacoco, unittest.mock, Pitest
- Automation: Docker, Puppet, Terraform, Nomad, Make
- Continuous Integration: Jenkins, Travis, SonarCloud
- Monitoring: Grafana, Prometheus, ELK Stack

VCS: Git, Subversion
Platforms: macOS, Linux
Office: LEX, LibreOffice

### LANGUAGES

• French: Mother tongue

• English: Fluent (TOEIC L&R: 990 [March 14, 2017], IELTS: 8 R9L9W7S7 [June 1, 2018])

### **CERTIFICATIONS**

• Driving Licence