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] — 2013–2015

EXPERIENCE

Nexmo — London, United-Kingdom
Junior Software Developer in Test — November 2018–Present

- **Voice API**: member of the RTC stack.
- Testing: maintenance of the test suite (e.g. abstraction and generation of tests, parallelisation).
- Monitoring: facilitate incident impact measurement, track API usage, alerting (push for on-call).
- Investigations: understanding test failures or abnormal behaviours across the services.
- Development: built a rating (billing) engine with a small team, various internal changes in services.
- DevOps: maintenance of on-demand test environments (e.g. dockerise services, investigate issues).

KTH — Stockholm, Sweden
Research Intern — February 2018–June 2018

- **Adaptation of Amplified Unit Tests for Human Comprehension**: Generating natural language explanations for Java unit tests generated by DSpot.
- **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.
- **Supervisor**: Shin Yoo (COINSE Lab)

University of Rennes 1 & IRISA — Rennes, France
Student (Group project) — September 2016–April 2017

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

IRISA & INRIA — Rennes, France
Research Intern — May 2016–July 2016

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

University of Caen — Caen, France
Student (Group project) — September 2014–May 2015

- **Building the best ships for the video-game Faster Than Light**: Wrote a simulator to automate fights; used Genetic Algorithms and Data Mining.
- **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, Nomad, Make
- **Continuous Integration**: Jenkins, Travis, SonarCloud
- **Monitoring**: Grafana, Prometheus, ELK Stack
- **VCS**: Git, Subversion
- **Platforms**: macOS, Linux
- **Office**: LaTeX, LibreOffice

Languages

- **French**: Mother tongue
- **English**: Fluent (TOEIC L&R: 990 [March 14, 2017], IELTS: 8 R9L9W7S7 [June 1, 2018])

Certifications

- **Driving Licence**