

Alexandre Gbaguidi Aïsse | CV

02 Place Aurélie Nemours, 75013, Paris, France

☎ +33 642426980 • ✉ aga@lrde.epita.fr • 🌐 shumpaga.com
in [alexandregbaguidiaisse](#) • 🌐 [shumpaga](#)

Software Engineer at **Acute3D** | **Bentley Systems**

Experience

- **Bentley Systems – Reality Modeling** **Paris, France**
Software Engineer *Sep 2018 - to date*
Currently working on *ContextCapture™* cloud services: scheduler, multithreading.
End-of-studies internship *Feb 2018 - Aug 2018*
Improve *ContextCapture™* point cloud support by implementing: an **algorithm which retrieves all scanners positions** of any static point cloud and a **visibility algorithm** which tells for each point which scanner **best** sees it. Both algorithms are under **ongoing patents**.
- **LRDE (Research and Development Laboratory of EPITA)** **Paris, France**
Student researcher *Sep 2016 – Jan 2018*
Various contributions to Spot¹: Optimization of ω -automata minimization using Boolean satisfiability (SAT) solvers, conversion of common ω -automata classes into co-Büchi automata and checking “persistence” properties on LTL formulas.
- **Ecole polytechnique – HEC** **Paris, France**
Teaching assistant *Aug 2016*
A team of 4 assistants helping students to quickly master all programming notions (Python) being seen in a Big Data course.

Education

- **EPITA** **Paris, France**
Graduate school of Computer Science, Engineering degree *Sep 2013 – Sep 2018*
- **Staffordshire University** **Stafford, England**
Real-time and embedded systems, Semester abroad *Jan 2015 – Mai 2015*

Some programming projects

- Python:** Multiple barcode recognition on a picture (using OpenCV).
Personal blog shumpaga.com (using Django).
- Scala:** 'Tron' AI implementation: reached the 107th place over 4000 players worldwide.
- C++:** Distributed memory allocator with vector clocks for causal ordering of events (using OpenMPI).
Real-time CUDA Raytracer.
A spell checker based on a patricia trie with 3000 qps/core and 512 Mo as constraints.
- C:** POSIX-compliant shell based on the SCL.
Implementation of malloc, realloc, calloc and free with a first fit algorithm.
Basic optical character recognition software with feedforward neural network.

Skills

- Languages:** French (Native), Russian (Native), English (TOEIC 850)
- Programming:** C, C++, Python, MATLAB, C#, Scala, PostgreSQL, Java.
- OS:** Linux / UNIX, Mac Os X, Windows.
- Interests:** Audio recording, mix, master, computer-aided music, travels, event planning.

¹Spot is a C++14 library for LTL, ω -automata manipulation and model checking: spot.lrde.epita.fr.