



Valentin Haudiquet

Computer science student at ENS Rennes

Interested in operating systems, virtualization, computer architecture, embedded systems

Education

- 2024 - 2025* **M2 SIF**, ENS Rennes, Second year of CS Master's Degree (Research)
- 2023 - 2024* **Agrégation**, ENS Rennes, Preparation for national competitive exam
'Agrégé' in computer science, rank 14/22
- 2022 - 2023* **M1 SIF**, ENS Rennes, First year of CS Master's Degree (Research)
- 2021 - 2022* **L3 SIF**, ENS Rennes, Last year of CS Bachelor's Degree
- 2018 - 2021* **Prépa**, Lycée Bellevue Toulouse, two-year intensive program preparing for the national competitive exams for entry to engineering schools.
Prépa MPSI/MP, entry to ENS Rennes

Professional experience

- 2025* **Master's internship**, ONERA, "Probabilistic analysis of execution time on multi/manycore heterogeneous boards for optimal task mapping"
Real-time multicore optimal task mapping using a solver that automatically measures a pWCET for a solution on target platform
- Summer 2023* **Master's internship**, Huawei Research Zurich, "Improving performances of virtualized servers by removing the guest kernel/user isolation layer"
Working on a Linux kernel patch to allow programs to run in kernel mode
- 2022 - 2023* **Master's research project**, IRISA (Rennes), "Transparent use of node-local storage for asynchronous I/O on supercomputers"
Library replacing MPI-IO calls, caching data locally, with neighbour communication
- Summer 2022* **Bachelor's internship**, IRIT (Toulouse), "Reducing traffic in data centers by avoiding the transition of data through intermediate servers"
Library replacing read/write, using memory protection to provide data on-demand

Personal projects

- 2023 - 2024* **RISC-V simulator**
Basic RISC-V processor simulator, capable of running BBL and booting Linux
- 2022 - 2023* **Java Virtual Machine implementation**, school project
Basic C JVM for GNU/Linux, Java 8 specs, using OpenJRE runtime

- 2018 - ?* **Blade Player, Android multi-source music player**
Maintaining for 100+ users this Android application that plays music from Spotify or Deezer
- 2018 - 2020* **Operating system kernel development,x86 architecture**
Basic operating system kernel, with drivers, filesystem, Newlib ported, dash shell

Skills

Programming languages	C, Assembly (x86, RISC-V, ARM), Java, TypeScript/JavaScript, Kotlin, Python, OCaml
DevOps / Workflow	Linux, Bash, Git, CI/CD, Docker, Kubernetes, virtual machines
Presentation tools	LaTeX, Figma, HTML/CSS, Inkscape, Gimp
Spoken languages	French (native), English (fluent), Spanish (basic)

Contact

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