

Louis Vialar

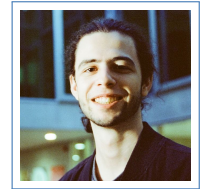
Software Engineer

Lausanne, Switzerland

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github.com/zyuiop



Education

- 2019 – 2022 **MSc in Computer Science**, *EPFL*, Lausanne, Switzerland, GPA 5.5/6
Speciality: Computer Security Thesis title: Side Channel Analysis of NIST Lightweight Cryptography Candidates
- 2016 – 2019 **BSc in Computer Science**, *EPFL*, Lausanne, Switzerland, GPA 5.1/6
Generalist Computer Science degree, with focus on Software Engineering courses.

Work Experience

- 2022 – **Developer**, *Apptitude SA*, Lausanne, Switzerland
Develops custom-made apps for enterprise customers all over Switzerland.
- 2022 – 2022 **Rapid Prototyping Engineer**, *Kudelski Security*, Lausanne, Switzerland
Developed quick prototypes of potential future products for internal assessment.
- 2021 – 2022 **Trainee**, *Kudelski Security*, Lausanne, Switzerland
Internship and Master's Thesis.
Conducted side-channel analysis of multiple lightweight symmetric ciphers participating in the NIST Lightweight Cryptography standardization process.
Worked on internal web-applications (both frontend and backend).
- 2018 – 2021 **IT Student Assistant**, *EPFL*, Lausanne, Switzerland, Part time
Troubleshooted problems on students personal computers.
- 2018 – 2020 **Teaching Assistant**, *EPFL*, Lausanne, Switzerland, Part time
Contributed to the teaching and grading of an undergraduate compilers course.
Contributed to the teaching, course material and grading of an undergraduate software engineering course.
Supervised 6 to 7 student teams in the undergraduate software engineering project course.
- 2015 – 2017 **Software Developer**, *Epicube SAS*, Remote, Part time
Worked on the network stack of a multiplayer game network, hosting more than 11'000 simultaneous players and more than 1M unique players.

Voluntary Work Experience

- 2022 – **Organizer**, *PolyLAN*, Lausanne, Switzerland, Voluntary
Participated to the organization of a LAN party at EPFL.
Helped with the deployment of the network infrastructure (Cisco Switches and Linux router, UDP broadcast across VLANs).
Helped developing custom internal web-applications.
- 2018 – **President, IT Manager**, *Japan Impact*, Lausanne, Switzerland, Voluntary
Organized multiple editions of a Japanese culture convention for about 10'000 visitors over a weekend.
Designed and developed the ticketing website and point-of-sale system.
Designed and developed multiple internal applications, including a CAS and SAML SSO.
Deployed and maintained a deployment using Docker Swarm.
Managed an organizing committee of 30 voluntary members.

2014 – 2015 **Software Developer**, *SamaGames*, Remote, Voluntary
Built the network stack and managed the servers of a multiplayer game network, hosting more than 3'000 simultaneous players and more than 300'000 unique players.

Publications and conferences

- 2022 Fast Side-Channel Key Recovery Attack on Elephant Dumbo ([eprint](#)). Presented at [NIST LWC 2022](#) and [SSTIC 2022](#).
- 2022 Side-Channel Analysis of NIST Lightweight Candidates ([self-hosted](#)) (Master's thesis).

Languages

French Mother tongue
English Fluent (C1)

Hobbies

- Science fiction and fantasy works
- Video-games, in particular J-RPG
- Tabletop RPGs