Walid Cavelius

Paris, France

Education

University of Technology of Compiègne

Sept. 2021 – Jul. 2026 (expected)

Master of Engineering, Computer Science

Compiègne, France

• Relevant Coursework: Algorithms and Data Structures, Statistical Methods, Deep Learning, Computer Vision, Computer Architecture, Web Development, Database Design, Cognitive Science

Shanghai University

Sept. 2025 – Jan. 2026 (expected)

Exchange Semester, Computer Science

Shanghai, China

• Relevant Coursework: Advanced Data Analysis for Smart CPS, IoT Prototyping and System Design, Agile Methodologies for Software Development

Experience

Criteo Sep. 2024 – Feb. 2025

Software Engineer Intern

Paris, France

- Improved CI/CD by designing and implementing a scalable data pipeline to analyze Criteo's build system, processing 10M+ build events and improving CD times by 20% across major services.
- Implemented a robust REST API in C#/.NET to automate data ingestion from internal build systems; integrated with PySpark and Presto SQL for distributed processing and reporting.
- Developed a dashboard in React for real-time monitoring of repository health, build performance, and overall system efficiency. Deployed it company-wide and adopted by 900+ engineers to monitor and optimize development workflows.

Projects & Research

UTC Film Club website | PHP, HTML, CSS, Javascript, MySQL

2024 - Present

- Designed and maintained a database of the movies seen based on the TMDB database and API.
- Implemented an authentication system, allowing members to log in with their school account and engage in the community.
- Developed a rating system, allowing users to share their opinions and rate movies they have attended screenings for.

Survey Paper on IoT Security | IoT, Cybersecurity, 5G Security, Network Protocols

2025 - Present

- Writing a survey paper in collaboration with UTC, focusing on emerging and existing security challenges in the Internet of Things.
- Covers layered security in IoT systems, including wireless sensor networks and Content-Centric Networking (CCN).
- Includes analysis of time-critical security aspects in 5G-enabled IoT architectures.

School Integration Website | HTML, CSS, MySQL, Laravel

2023

- Designed and developed a dynamic web platform for managing student integration events, featuring registration, real-time updates, and photo galleries.
- Optimized for performance and usability, supporting hundreds of concurrent users during peak event days.

Skills

Languages: French (native), English (fluent), German (intermediate), Chinese (beginner)

Programming languages: Python, SQL, JavaScript/TypeScript, C, C#, Rust, Java, Lisp

Tools/Technologies: Bash, Git, Vim, React, SvelteKit, Docker, MySQL, Latex, Typst, Material UI

Extracurricular

UTC Film Club

Sept. 2022 - Present

Projection ist

University of Technology of Compiègne

- Selected and projected films for weekly screenings in the university auditorium and coordinated outdoor movie events for 100+ attendees.
- Managed social media accounts, increasing average attendance.