WALID CAVELIUS

Paris, France

→ +33 6 67 20 01 00 walid@caveli.us in linkedin.com/in/walid-cavelius github.com/walidcavelius

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

Experience

Criteo
Software Engineer Intern

Sep. 2024 – **Feb. 2025** *Paris. France*

• Improved CI/CD pipelines by designing and implementing a scalable data pipeline to analyze Criteo's build system, processing millions of data points to extract actionable insights and optimize development workflows.

- processing millions of data points to extract actionable insights and optimize development workflows.

 Developed a REST API in C#/.NET for efficient data extraction and transformation, utilized PySpark and Presto SQL
- for large-scale data processing and advanced analytics.

 Built an interactive dashboard in React, enabling monitoring of build performance, repository health, and system
- Built an interactive dashboard in React, enabling monitoring of build performance, repository health, and system efficiency across the organization.

Projects

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

2024 - Present

- Creation and maintenance of a database of the movies seen based on the TMDB database and API.
- Implementation of an authentication system to enhance user experience, allowing members to log in with their school account and participate in the film club community.
- Integration of a dynamic rating system, allowing users to share their opinions and rate movies they have attended screenings for, contributing to a collaborative and engaging film-watching experience.

Traffic Sign Detection System | Python, Computer Vision, Deep Learning

2024

- Developed and implemented dual approaches for traffic sign detection as part of a UTC course: classical computer vision using HOG features with SVM classifier, and a modified YOLOv1 deep learning model.
- Achieved significant detection accuracy with classical approach (82% AP, 57% mAP) and deep learning method (49% mAP) by implementing robust preprocessing, custom Non-Maximum Suppression, and various data augmentation techniques.

School integration 2023 websites | HTML, CSS, JS, Laravel

2023

- Developed the UTC 2023 integration's official website.
- Developed a task allocation website, streamlining the assignment of responsibilities to organizers based on automated time slots.

Skills

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

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

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

Extracurricular

UTC Film Club Sept. 2022 – Present

Projectionist

University of Technology of Compiègne

- Curating and projecting movies in a school auditorium.
- Communication and promotion of the screenings.

Associative event Compiègne en Lumière

 $\mathbf{Sept.}\ \ \mathbf{2022-Mar.}\ \ \mathbf{2023}$

 $Concert\ Production$

University of Technology of Compiègne

- Part of a three-person team in successfully planning and executing a large-scale concert event for the university community.
- Managed a €12,000 budget to book artists.