Teddy Emmanuel Kana Boumkwo II

Software Engineering Student – Laval University

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Eligible to work in Canada without sponsorship

Profile

Software Engineering student specializing in AI-powered applications, full-stack web development, and computer networks. Experienced in building end-to-end projects with Python, Java, C++, JavaScript, React, Flask, and cloud tools. Passionate about applying data structures and algorithms, probability and statistics, and basic system design principles to solve real-world problems and to create user-focused scalable features.

Professional Experience

IT Asset Management Analyst | June 2025 – Present

Ministry of Education – Internship / Student Position

- **Developed automation scripts** to synchronize the IT asset inventory in Octopus, reducing input errors by **30%**.
- **Built small internal tools** to validate hardware & software records and improve data integrity between systems.
- Proactively updated and maintained over **1,000 hardware assets and software licenses**.
- Collaborated with IT and operations teams to evaluate migration to a new ITSM/ITAM platform.

Network Technician | Sept. 2024 – June 2025

Ministry of Family – Internship / Student Position

- Automated daily, weekly and monthly reporting pipelines (Python/Excel/Power BI) **ensuring 100% data consistency for 600+ employees**.
- Developed an interactive **Power BI dashboard** to improve visibility on network usage and incidents.
- Supported network operations and troubleshooting, strengthening practical skills in **computer networks and engineering**.

Open Government Advisor | May 2024 – Aug. 2024

Ministry of Cybersecurity and Digital Affairs – Internship / Student Position

- **Developed a custom data quality assessment script** to analyze 250+ datasets, **detecting 30% more anomalies** vs previous method.
- **Analyzed more than 250 datasets** and developed a custom quality-assessment script, detecting and fixing nearly **30% more anomalies** than before.
- Contributed to the improvement of an **AI-based user assistant**, reducing manual email requests by **40%**.
- Participated in the **standardization and enhancement of open data**, resulting in a **25% increase in compliance rate**.
- Conducted statistical analyses using **Google Analytics** and **Matomo**, tracking over **20,000 monthly consultations** and improving the **SEO and visibility** of government portals.
- **Speaker at a 200–300 stakeholder conference**, presenting the government's action plan to open data owners.

Skills

Programming Languages: Python, Java, C++, JavaScript, SQL
Frameworks and Libraries: React, Flask, OpenCV, NumPy, Pandas, Node.js
Cloud and DevOps Technologies: Azure, Docker, Linux, Git
Networks and Systems: Computer networks and engineering, TCP/IP fundamentals, routing/switching basics, troubleshooting
Computer Science Fundamentals: Data Structures & Algorithms, Object-Oriented Programming (OOP),

REST APIs, basic System Design, Agile Methodology
Mathematics and Analytics: Probability, Statistics, data analysis and visualization (Power BI)
Other: LaTeX, MySQL, Octopus
Languages: French (Native), English (Fluent), Spanish (Learning)

Technical Projects

Real-Time Emotion Detector – Python, OpenCV, Flask, React
Built an end-to-end web application for real-time facial emotion recognition, **trained on the FER2013 dataset** and deployed with a Flask API and React frontend.

Gender and Age Detector – Python, OpenCV, Flask, React
Interactive web deployment integrating **computer vision and deep learning** models for age and gender prediction.

Connect 4 Game – Python, Web App deployed on Vercel
Designed and implemented a playable **Connect Four** web game, including board rendering, turn management, and win-condition detection, with a responsive user interface.

Movie App – HTML, CSS, JavaScript, TMDB API
Web application allowing users to search, view, and display movie information using **The Movie Database (TMDB) API**.

Brick-Breaker Game – HTML, CSS, JavaScript
Interactive browser game published on GitHub Pages.

Spaceship Game – HTML, CSS, JavaScript
Interactive browser game published on GitHub Pages.

Education

Bachelor of Software Engineering – Laval University   2023 – Present
Class of 2027
Relevant Coursework: Data Structures & Algorithms, Probability and Statistics, Computer Networks, Software Architecture, Object-Oriented Programming

Leadership and Involvement

Member of the **Computer Security Club (CSIUL)** – Offensive security (**fuzzing**), OSINT, **CTF**, ethical hacking, applied cybersecurity.

Member of the **Artificial Intelligence Club (CIA)** – **Partner project with Thales** to **secure vehicle networks** via the CAN bus: AI for cybersecurity, automotive security, anomaly detection, and real-world industrial collaboration.

Member of the **Autonomous Vehicle Club (VAUL)** – autonomous robotics, computer vision, **LiDAR**, algorithms, **simulation server**, Linux, and competition participation.

Certified High-Performance Soccer Coach – CS TRIDENT – leadership, communication, performance analysis, and team management.