Aleksandar Dubljevic

416-312-8161 | Toronto | dubl6985@mylaurier.ca | Linkedin | Github

EDUCATION

University of Waterloo   Waterloo, ON
Bachelor of Computer Science   *Sept. 2023 – Present*

Wilfrid Laurier University   Waterloo, ON
Bachelor of Business Administration   *Sept. 2023 – Present*

EXPERIENCE

Software Engineer - Dashboard Lead   Sept. 2023 – Present
University of Waterloo Formula Electric   *Waterloo, ON*

- Led the development of an internal dashboard for live telemetry, enabling team members to monitor real-time performance from over 150 data sources, eliminating the need to restart the vehicle to view sensor data
- Enhanced sensor data readability and transfer rate by over 500% by designing and implementing a data pipeline
- Ensured timely development and deployment of team software by utilizing SDLC and Agile methodologies for effective project management, leading to increased team velocity and a 35% reduction in work-in-progress tasks
- Collaborated with over 100 team members by utilizing Atlassian Suite (Jira, Confluence, Bitbucket) to manage workflows, coordinate resources, and track project progress across more than 10 cross-functional teams

DECA Chapter President   Sept. 2021 – June 2023
Ursula Franklin Academy   *Toronto, ON*

- Achieved 3-time provincial finalist and medalist status (Top 10 in Ontario) in business finance event
- Mentored 40+ students on key DECA skills including case analysis, presentation skills, and critical thinking

PROJECTS

Dime Defender | **Hack the North 2024 Finalist** — *AWS, Svelte, Voiceflow, GenAI*   Sept. 2024

- Voted 1st place among 800+ participants at Hack the North 2024 (Canada's largest hackathon) by developing a Chrome extension that helps users reduce impulsive spending through AI-driven insights powered by OpenAI API
- Architected a scalable AWS serverless backend (Lambda, API Gateway) that supported over 75 concurrent users, achieving sub-500ms response times through API request optimizations like pagination and payload compression
- Led a team of 4 developers to deliver a production-ready MVP in 36 hours, coordinating development across frontend, backend, and AI components while using GitHub for version control
- Utilized advanced prompt engineering techniques to deliver high quality AI responses to the user

MpoxMap | **Ignition Hacks 2024 Winner** — *Typescript, React, Next.js, HTML/CSS*   August 2024

- Developed MpoxMap, a web application using Next.js 14 and React that monitors global Mpox outbreaks using 3D data visualizations, displaying real-time and historical data, keeping users informed on the latest outbreaks
- Implemented API caching optimizations to reduce redundant calls to TheNewsAPI and Mapbox API, improving page load times by 200%, resulting in a smoother user experience and reduced API costs
- Deployed to web with Vercel serverless architecture, allowing for seamless updates to data sources

GameWave | *Java, PostgreSQL, Replit*   March 2023 – June 2023

- Constructed a full-stack mock video game marketplace using Java Swing, with features such as login/signup, leaving reviews and searching/filtering for games
- Implemented a content-based filtering recommendation algorithm that analyzed user preferences to suggest games, in combination with a PostgreSQL database used to efficiently store and retrieve user data
- Integrated secure user authentication with SHA-256 hashing to safeguard sensitive user info through data masking

UWFE Dashboard | *Python, CAN, Figma, FreeRTOS, Linux*   Jan 2023 – Current

- Designed and developed a custom driver dashboard for the 2024 University of Waterloo Formula Electric team using Python, Figma and Linux, enhancing vehicle data visibility for drivers during competitions
- Enabled real-time data exchange between the dashboard and the car ECU's by integrating CAN bus communication, improving the depth of performance metrics while also simplifying the debugging process
- Deployed and tested dashboard software on a standalone Beaglebone Black running Debian Linux

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, Typescript, HTML/CSS, SQL, Svelte, Shell Script
Frameworks: React, Node.js, Next.js, FreeRTOS, TCP/IP, AWS, Azure, Agile, SDLC
Developer Tools: Git, Docker, Tableau, Atlassian Suite, VS Code, Power BI, MS Office, Terraform, Excel, GenAI
Case Competitions: Snap Inc. Xlerate (Finalist), BDO Future Leaders, Parachute Consulting