Aleksandar Dubljevic

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Education

University of Waterloo Sept. 2023 – May 2028
Bachelor of Computer Science - Relevant Coursework: Data Structures and Algorithms *Waterloo, ON*

Wilfrid Laurier University Sept. 2023 – May 2028
Bachelor of Business Administration *Waterloo, ON*

Experience

Cloud Engineer Jan. 2025 – April 2025
CIBC *Toronto, ON*

- Deployed and tested new Azure resource configurations (Databricks, VMs, Storage) for enterprise applications across dev/test/prod environments, completing 63 Jira tickets with zero post-deployment rollback incidents
- Delivered over 10 story points per sprint in an Agile Scrum environment, matching the productivity of senior engineers, while also thoroughly documenting infrastructure changes for knowledge sharing and audit compliance
- Mitigated a SEV2 outage by troubleshooting with Azure Network Watcher, identifying and correcting NSG/VNet misconfigurations, restoring service for thousands of users
- Recognized as a top-performing intern and admitted into CIBC Spark, a selective program for high-achieving interns based on quickly mastering complex systems and independently contributing to production infrastructure by week 3

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 transfer rate by over 500% by designing and implementing a wireless 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

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

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. 2024 – June 2024

- Designed and developed a custom driver dashboard for the University of Waterloo Formula Electric team using Python and Figma, deployed to Linux, enhancing vehicle data visibility for drivers during competitions
- Enabled real-time data exchange between the dashboard and the car ECUs 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, Ruby, Go, Rust
Frameworks: React, Node.js, Next.js, FreeRTOS, CI/CD, AWS, Azure, Kubernetes, Ruby on Rails, Agile, SDLC
Developer Tools: Git, Docker, Tableau, Atlassian Suite, Power BI, MS Office, Terraform, Cursor, Claude Code, GenAI
Case Competitions: Snap Inc. Xlerate (Finalist), BDO Future Leaders, Parachute Consulting