

Augusts Zilakovs

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Education

Western University

BESc, Software Engineering

London, ON

Sept 2020 - Apr 2026

- *Relevant Courses:* Data-Structure and Algorithms, Database Management Systems, Software Design and Construction, Computer Networking, Discrete Math, Scripting Programming Languages.

Work Experience

SOTI

Software Developer Intern

Mississauga, ON

May 2024 – August 2025

- Diagnosed and resolved frontend and backend bugs, improving application stability and performance.
- Developed and implemented new features and system improvements based on client and stakeholder requirements.
- Led an epic-sized initiative to deprecate a critical feature, including technical investigation, authoring design documents, coordinating implementation, and delivering the epic to completion.
- Designed, wrote, and maintained extensive unit tests, integration tests, and behavior-driven development (BDD) tests to ensure code reliability.
- Contributed to a 17-member Agile development team, actively participating in sprint planning, daily stand-ups, and retrospectives.
- **Technologies:** Angular, C#, C++, Typescript

Projects

Capstone Project: Automated 3×3 Basketball Video Analysis (Ongoing Project)

- Developing an automated computer vision pipeline to analyze 3×3 basketball gameplay from broadcast video footage, enabling spatial and temporal insights for coaching and performance evaluation.
- Implementing homographic transformations to project 2D broadcast video frames onto a standardized court plane, enabling accurate localization of player positions and on-court actions.
- OpenCV & SAM2 segmentation model for camera calibration, homography estimation, and geometric transformations, court line segmentation and automated corner detection.
- **Technologies:** Python, OpenCV, SAM2

Baja Racing Inventory Manager (Ongoing Project)

- Leading backend and database development for an inventory management system supporting a university Baja racing team's vehicle build and maintenance workflow.
- Developed secure file management functionality, enabling team members to upload and download part documentation and related resources.
- Collaborating with team members to align system functionality with real-world vehicle development and maintenance workflows.
- **Technologies:** React, NodeJS, MySQL, Docker, AWS

FB2 Book File Manager [[GitHub Repository](#)]

- Developed a book management software that reads, saves, organizes, manages, and edits thousands of XML files in the fb2 format.
- Implemented user friendly UI, file editing and saving, file searching, image encoding and decoding for efficient BLOB storage, both zipped and unzipped folder scanning, batch file editing/saving, and ability to change how data is displayed.
- **Technologies:** C#, SQLite

Hero Lists [[GitHub Repository](#)]

- Developed a full stack application for users to create, share, and review lists of popular superheroes.
- Implemented user authentication, protected routing, small screen support.
- **Technologies:** React, JavaScript, Node.js, MySQL, AWS

Hackathons

Hack-West 10: Best use of Circle award

Outsider Trading [[GitHub Repository](#)]

- Developed a web app that allows users to track the investments of US senators to invest side by side with them.
- Automated the connection process between Circle crypto wallets and new user accounts.
- Implemented a live SMS update system that notifies users when a senator invests in a stock.
- **Technologies:** React, Javascript, MySQL, AWS, Circle, InfoBip, Beautifulsoup

West-Overhaul: Third place overall

InkLink [[GitHub Repository](#)]

- Worked with in a team of three to implement text to speech, speech to text, and live site translation onto a prewritten codebase.
- Implemented user authentication and route protection using JWT tokens.
- **Technologies:** Javascript, HTML, Node.js, AWS

Languages: Proficiency in English, Russian (Speaking)

Skills: Python, C, C#, Java, JavaScript, HTML/CSS, Docker, MySQL, SQLite, React, Angular, NodeJS, ExpressJS