# Steven Mugisha Mizero

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## WORK EXPERIENCE

**FOOD FROM THOUGHT** (a research group based at the University of Guelph) Guelph, ON

Software Engineer Jan 2023 – Present

- Architected a TypeScript SDK to extend a legacy data schema language, cutting a 2-year release delay, by reverse engineering a Rust library to support internal Node based tools.
- Led the development of a robust RESTful API using Express, improving response time by 30% and supporting over 1000 concurrent users, by enabling real-time data exchange between frontend and backed services.
- Designed a UI using React to compose schema models from a tabular approach, driving the website to an engagement of, at peak times, an almost 45% increase.
- Ideated and developed a new testing strategy, saving hundreds of development hours per year by using the state management library in our tests instead of mocking it.

Developer

- Redesigned UIs using Vue and improved user experience, accelerating launch timelines by 3 months, through user testing and collaborating with product and engineering teams.
- Engineered a NodeJS data validation SDK, automating 85% of the backend user input validation process with robust schemas, streamlining deployments.
- Orchestrated a CI/CD pipeline using Gitlab, deployed via Azure Static Web Apps with shared access, reducing deployment time by 40% and post-release defects by 30%.

**UNIVERSITY OF GUELPH** (School of Engineering) Guelph, ON

Geospatial Software Developer Dec 2021 – Dec 2022

- Designed a system to dynamically render weather station points, improving the website performance by 86% using super cluster caching with Redux.
- Accelerated data delivery pipelines by transforming multi-dimension data formats – HDF5 to JSON, reducing storage cost by $10,000 per year, and enhancing efficiency with parallel programming.

## PROJECTS

**WORLD WEATHER WATER DATA SERVICE (W3S)** Jan 2022

- A Data as a Service (DaaS) platform that allows application users to download climate data of a pre-specified region within any watershed across the globe.

**VEYO** Nov 2024

- A designated drivers mobile app for individuals who like to be driven in their own cars built using React Native, Stripe, Clerk, Neon DB, and Google Cloud APIs.

**SAIDIFY** July 2024

- An open source NPM package to cryptographically compute hashes for data objects and embed the hashes inside to achieve self-sovereign models, built using Node and TypeScript.

## ADDITIONAL

**Languages:** JavaScript, TypeScript, CSS, HTML, Python, Bash, and SQL
**Frameworks:** React.js, Next.js, Redux, Express.js, Node.js, REST APIs, and Django
**Technologies:** Git, PostgreSQL, Oracle, MongoDB, Azure, AWS, and Kubernetes/Docker
**Certifications & Training:** AWS Certified Solutions Architect – Associate, and Docker & Kubernetes Training

## EDUCATION

**UNIVERSITY OF GUELPH** Guelph, ON

Master of Science in Data Analytics Sept 2021 - Sept 2023

**UNIVERSITY OF NEBRASKA-LINCOLN** Lincoln, NE

Bachelor of Science Aug 2017 - May 2021

Major: Applied Climate; Minors in Computer Science and Leadership & Entrepreneurship