OM OGALE

COMPUTER SCIENCE

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SKILLS

LANGUAGES: TypeScript, C++, Python, C, SQL, JavaScript, Racket
WEB TECHNOLOGIES AND TOOLS: Next.js, ReactJS, Node.js, Express.js, Flask, MongoDB, MySQL, Docker, Material UI, Chakra UI, jQuery, HTML5, CSS, MaterializeCSS, Git, Bash, Android Debug Bridge, QNX, Agile, Jira, Jenkins, Slash, VS Code, VirtualBox, Microsoft Office, LaTeX, Vercel

EXPERIENCES

Ford Motor Company of Canada, *Software Developer*, Oakville — Jan. 2024 - Apr. 2024
- Spearheaded a **56% increase** in the total number of reports by independently developing dynamic KPI reports involving complex charting and breakdowns of **over 60 KPIs** by utilizing APIs such as **Recharts** and **Google Charts**.
- Developed the team website in **TypeScript** with **NextJS** utilizing the **Material UI** Component Library and **MUI X**. Built complex standalone implementations for dashboards such as **Global Metrics** and **Performance Targets** integrated with **SWR caching strategies**, **CGI Scripts**, and **MySQL** scripting.
- Maintained and developed charts for the legacy team website in **JavaScript** utilizing **MaterializeCSS** with **jQuery**.
- Implemented complex state management solutions utilizing **Zustand** and the **React Context API** as well ideated global UI features utilizing advanced components, implementing custom validation and data representation with **DataGrids** and **DatePickers** while also improving load times by **90%.**

Ford Motor Company of Canada, *System Software Developer*, Ottawa — May 2023 - Aug. 2023
- **Independently investigated and developed** key KPIs for a new ECU to identify performance bottlenecks utilizing **OOP practices**, **internal APIs** and **Slash** in **Python** within an Agile framework.
- Setup the **First** installation of Ford's latest in-development infotainment system in the Performance Lab gaining hands-on-experience with automotive hardware.
- **Lead tri-weekly standup meetings** with the Performance team to notify metrics, regressions, as well as blockers for the ECU that I was managing.
- In-depth involvement with the OS by working on **QNX** and **Android Debug Bridge (adb)** as well as virtualization using **VirtualBox**.
- Received an **Outstanding** evaluation from both **Yaron Spanglet, Senior Manager – Base Platform and System Performance** as well as **Rahul Trivedi, my Supervisor** for being the **sole individual** responsible for upkeep of the latest systems in the Performance Lab.

Eureka! Junior 2021 National Entrepreneurship Competition, IIT Bombay, Mumbai, India — Sept. 2021 - Jan. 2022
- Accomplished **Third Place** out of more than **13,500 teams nationally** (throughout India).
- Junior Edition of **Asia's largest Business Model Competition.**
- Presented a novel concept of a smart water-saving attachment to household and commercial faucets.

PROJECTS

Om's Exhibit (In Progress) | TypeScript, NextJS, NodeJS, Express.js, MongoDB, ChakraUI — Jan. 2024 - Current
- My personal digital exhibit! A deep-dive into my projects, milestones, and skillset.
- I love writing and am currently working on a blog to feature all my poetry, articles and speeches written through the years.
- Developed the frontend in NextJS with Chakra UI and the backend server in Express.js which connects to MongoDB to serve blog posts in mdx.
- Planning to add user authentication and authorization, commenting, an animated like counter, and relevance-based search (utilizing fuzzy search as well) with MongoDB.

DailyDive | ReactJS, Python, Javascript, Flask, TailwindCSS, APIs — Sept. 2023
- Team lead in developing 'DailyDive' (Hack The North 2023), a full-stack web app that acts as a clutter-free aggregator of tailor-made educative and amusing content.
- Worked on the backend integrating and implementing API functionality using Flask such as the CohereAPI as an online chat guru as well as the MemeAPI for the feed and designed the frontend using Javascript, React, TailwindCSS, etc.
- Deployed using Vercel on the frontend and Replit for the API endpoints on the backend.

Zippy | C++, Python, Docker — Feb. 2024
- Zippy is a fast text file compression/decompression tool that utilizes the Huffman Coding Algorithm and concurrent parallel processing.
- Achieves a greater than 2:1 compression ratio.
- Hybrid application that utilizes both C++ and Python to encapsulate the logic for the encoder and decoder.
- Containerized the application using Docker with multi-platform/architecture support via buildx.

EDUCATION

University of Waterloo, CAV: 87.5% — Sept. 2022 - Current
Bachelor of Computer Science (Expected 2027)
Term Distinction, President Scholarship of Distinction, SAT: 1550