YOUSSEF ZAYED

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SKILLS

Go | Python | JavaScript | TypeScript| C# | HTML/CSS | SQL | VueJs | NodeJs | React | Docker

EXPERIENCE

LaunchUp Technology Ltd. — Remote
Founding Engineer, Co-Founder — *May. 2022 - Present*

- Developed **Launch Up**, an innovative learning platform revolutionizing software engineering education.
- Achieved **over 13,000 hours** of platform usage and helped **36 students secure 48 work experiences**.
- Built an **interactive 3D multiplayer** real-time world using **Unity and C#** for an immersive learning experience.
- Engineered a **custom networking solution** using **web sockets and socket.io** for seamless real-time interactions.
- Integrated **WebGL builds** into **Electron**, handling cross-process communication for a smooth user experience.
- Developed an **in-depth curriculum** covering **JS, TS, React, Vue, GraphQL, NestJS, and Python**.
- Implemented **real-time video, voice calls with recording, and chat** using **WebRTC, LiveKit, and SendBird**.
- Deployed **scalable infrastructure and backend servers** using **NestJS, SQL, GraphQL on AWS**.
- Configured a bespoke automated **remote coding environment** using **Linux, EC2, and S3**.
- Integrated **OpenAI and Anthropic AI LLM APIs** for **automated assessment grading and feedback generation** from custom video recording and code capture features.

Google — Waterloo, ON
Software Engineer Intern — *May. 2022 - July. 2022*

- Developed a reliable microservice using **Go**, **Docker**, and **Google Cloud Platform** (GCP) to support product releases.
- Implemented an efficient **cron job** system to automate critical tasks and optimize resource utilization.
- Utilized **Bazel** to streamline **Go** build process, enabling automated builds and testing.
- Employed test-driven development (**TDD**) principles in **Go** to ensure code quality and maintainability.
- Created web scraping tools to gather data from multiple sources, enhancing data accuracy and completeness.
- Integrated **AWS** and **Azure** CLI tools for cross-platform data synchronization.
- Actively participated in code reviews, providing constructive feedback and ensuring adherence to best practices.

Clearco — Toronto, ON (Remote)
Software Engineer Intern — *Jan. 2022 - April. 2022*

- Built a Full-Stack web app using **Vue**, **Node**, and **TypeScript** to empower founders and partners at Clearco.
- Implemented efficient **REST** APIs to facilitate secure data exchange between frontend and backend systems.
- Conducted database migrations using **PostgreSQL**, and wrote **SQL** queries data communication across the platform.

Microsoft — Vancouver, BC (Remote)
Software Engineer Intern — *May. 2021 - Aug. 2021*

- Built an API for MS Teams meetings that exposes core functions to interface with external software and devices.
- Developed a **WebSocket** API using **TypeScript**, allowing for integration with new hardware partners.
- Designed the architecture and implemented a hardware plugin to connect over **WebSocket** using **C#** and device SDK.

Nokia — Ottawa, CA
Software Engineer Intern — *Sept. 2020 - April. 2021*

- Sole developer for an automation tool using **Javascript, Python, VueJS, ElectronJS** utilized by over 100 engineers.
- Developed 12 complex components in **VueJS and Python**, growing user adoption from **13 to 107** engineers.
- Presented progress to a committee of **15** engineers bimonthly resulting in correct scoping of **4 Agile sprints**.

Udacity — Remote
Data Engineering Mentor — *April. 2019 - April. 2020*

- Mentored **94 students** undergoing the Data Engineering Nanodegree receiving a student feedback rating of 4.32 out of 5.

Nokia — Ottawa, CA
Software Engineer Intern — *July. 2018 - Aug. 2018*

- Collaborated with the networking product diagnostics team of **9 engineers** at Nokia to optimize the diagnostics process.
- Modernized legacy **Perl** scripts by redesigning them in **Python** to increase future compatibility with all devices.

EDUCATION

Carleton University — Ottawa, CA
BS Computer Science | Minor in Entrepreneurship — *Sept. 2019 - April. 2024*