Zeerak Asim

647-688-9140 | asim.zeerak@gmail.com | linkedin.com/in/zeerak-asim | github.com/hahazz4 | zeerakasim.ca

EXPERIENCE

ENGLINKS PERSONAL TUTOR *Sept 2023 - May 2024*

EngLinks *Kingston, ON*

- Conducted tutoring in the courses Computer Architecture and Microprocessor Interfacing and Embedded Systems.
- Provided clear explanations and notes to help students grasp complex topics.

CONTROL SYSTEMS MEMBER *Oct 2022 - May 2023*

QHDT *Kingston, ON*

- Optimized backend, transitioning from **Python** to **Node.js**, reducing data processing time by **45%**.
- Streamlined the hyperpod **Arduino** data transfer using **JavaScript** and **Express.js** for enhanced reliability.
- Redesigned the preceding front-end code using **React** and **CSS**, which enhanced the **GUI** interface for faster loading time by **16%** and increased overall code efficiency.

SOFTWARE DEVELOPMENT INTERN *July 2022 - Sep 2022*

Gunkii *Vancouver, BC*

- Developed a responsive UI shopping cart and integrated **AfterPay**, utilizing **HTML**, **Liquid**, **CSS**, and **JavaScript**, which increased sales conversions by **8%** and successful checkouts by **5%**.
- Implemented website optimization through media compression and backend code refinement and resolved various UI bugs, resulting in a **15%** speed performance increase and a **10%** rise in user numbers.
- Provided peer guidance on **GitHub** issues and disseminated continuous website updates and optimization strategies through various platforms like **Google Docs** and **Slack** during weekly scrum meetings.

CO-TECHNICAL LEAD *Aug 2021 - Sep 2022*

GSDC *Kingston, ON*

- Co-instructed seminars on a beginner's introduction to web development. Constructed a presentation and assisted the members by guiding them in constructing a basic web page using **HTML** and **CSS**.
- Led HTML/CSS workshop for team portfolio creation, boosting project interest and productivity.
- Invented preliminary **UI/UX** designs for a custom website for the Queen's GDSC team. The idea was presented to the core team and was liked. This idea was passed down to the successor core team.

PROJECTS

VIRTUOPS VM MANAGEMENT APP *Sept 2023 - April 2024*

- A role-based VM management application for a capstone project that is intended for an operating systems course. Designed to facilitate streamlined administration and user interactions with virtual machines. Implemented using **Kerberos**, **libvirt**, **MySQL**, **Django**, **Nginx**, **Python3**, **Linux**, and **LightDM**.
- Enables differentiated privileges for admins and students, allowing operations like VM creation, snapshot management, and basic permissions, with enhanced administrative controls for firewall rule configurations.

SIMPLE RISC PROCESSOR *Jan 2023 - April 2023*

- Programmed a Reduced Instruction Set Computing (RISC) style processor using **Verilog HDL**, **Quartus II**, and **ModelSim Altera**. Capable of performing simple operations and other computational instructions.
- Attained more knowledge to gain a greater understanding of computing processors.

WEATHER APP *May 2022 - May 2023*

- An app that allows one to search a country or city and display its temperature and weather conditions using **React.js**, **JavaScript**, **CSS**, and **OpenWeatherMap's Weather API**.
- Easy-to-use interface with quick, accessible, and reliable information for the user.

EDUCATION

QUEEN'S UNIVERSITY *Kingston, ON*

Bachelor of Applied Science (B.ASc) in Computer Engineering *Sept 2020 - May 2024*

ADDITIONAL SKILLS

TECHNICAL SKILLS: HTML/CSS, JavaScript, Linux, VHDL, Verilog, Knime, C++, C, Java, Python, Ruby, Rust, EJS.js, React.js, Vue.js, Node.js, Express.js, UX Design, BeautifulSoup, Bootstrap, Arduino, Heroku, PHP, Apache, MongoDB, MySQL, PostgreSQL, Kerberos, libvirt, Django, Nginx, LightDM, Pytest, Kubernetes, PyTorch, TensorFlow

PROGRAMS: Microsoft Office Suite, Figma, Google Analytics, Azure, AWS, Google Cloud, Docker, JIRA (SDLC), Asana, Trello, Lucidchart, Slack, Microsoft Teams, Visual Studio