OSMAN SULTAN

Oakville, ON ◇ (647)-608-2802 ◇ osman.sultan@mail.utoronto.com ◇ osmansultan.me

EDUCATION

BASc, Industrial Engineering , University of Toronto   Expected 2025
Minor in Artificial Intelligence

Relevant Coursework: DSA, Data Analytics, Deep Learning, Probability, Stats, Systems Design, Databases, Operations Research I & II, Simulation Modelling, Supply Chains, Human-System Interaction

SKILLS

Languages	Python, Java, JavaScript, SQL, HTML, CSS
Data/ML	Pandas, Scikit-learn, PyTorch, Matplotlib/Seaborn, MySQL, SQLite, MongoDB
Web	Next.js 13, React.js, Vue.js, Bootstrap5, TailwindCSS, Node.js, SpringBoot, FastAPI
Tools	Git, Bash, PowerShell, Linux (Ubuntu, WSL), Linters (ESLint, Black), Vite, Figma

EXPERIENCE

Software Developer Intern   June 2022 - Sept 2022
Molex LLC   *Waterloo, ON*

- Transformed a **Linux-based** CLI into a user-friendly web client using **Python, FastAPI, and Jinja**, reducing hardware testing times by 35% and boosting system performance by 25%.
- Enabled multi-user testing on the same hardware by utilizing Python's **asyncio** library for asynchronous programming, resulting in an 80% increase in multi-user efficiency.
- Optimized internal testing processes by developing a solution tailored to specific hardware testing needs, significantly improving the team's productivity with a 20% increase in testing throughput.

LEADERSHIP

Founding Member and Lead   Oct 2021 - Present
UofT Freelancer's Organization, utfo.ca   *Toronto, ON*

- Spearheaded a club focused on creating digital solutions for student-affiliated entities, delivering 5+ projects through a strict Agile Software Development Life Cycle (SDLC), accelerating project delivery timelines by 30%.
- Engineered dynamic and responsive websites utilizing **React.js, Bootstrap5, and CSS Flexbox** for student-affiliated clubs, enhancing their digital presence and increasing user engagement by 40% on average.
- Managed project workflows via **Git, GitHub Actions, and Jira**, streamlining operations and ensuring consistently on-schedule delivery of high quality solutions.

PROJECTS

TerraSculpt. Developed a ML pipeline focused on synthesizing and classifying landscape images to assist with environmental monitoring and land-use planning. Utilized PyTorch to build and train 2 custom deep learning models, inspired by VAE and EfficientNetV2 architectures for generation and classification respectively. View the code here: github.com/osman-sultan/TerraSculpt

Underlying Factors in Soccer Injuries. Conducted a data-driven investigation into soccer injuries' impact on club success using Python, BeautifulSoup4, Pandas, Scikit-learn, and TensorFlow. Enhanced predictive accuracy via EDA, model engineering, and hyperparameter tuning of multiple models (Random Forest, Logistic Regression, ANN). View the code here: github.com/osman-sultan/Underlying-Factors-in-Soccer-Injuries

Proompter. Engineered an open-source platform for sharing and discovering prompts aimed at enhancing the effectiveness of Large Language Models (LLMs). Leveraged technologies such as Next.js, MongoDB, Tailwind CSS, and NextAuth.js to facilitate seamless user interaction, streamlined authentication, and to foster community engagement around AI-driven language models. Visit the live site here: projectproompter.vercel.app