Pushpinder Sekhon

31 Aristocrat Road, Brampton, Ontario L6P1X7

Education

University of Western Ontario

2022 - 2026

Bachelor of Engineering Science in Software Engineering - Deans Honor List 2022-2024

London, Ontario

Relevant Coursework - 2022-2024

- Data Structures and Algorithms
- Scripting Languages
- Programming Fundamentals For Engineers
- Software Construction
- Software Design
- Digital Logic Systems
- Foundations of Engineering Practice
 Business for Engineers

Experience

Quantum Computing Club

September 2023 - Present

Director of Research

London, Ontario

- Produced four documentary style videos on various quantum computing topics, including topics on qubits, the types of quantum computers, and modern innovations.
- Acted as researcher for projects in Software and Consulting teams.

Western Algorithmic Trading Club

September 2023 – Present

Alternative Data Team - Software Developer

London, Ontario

- Extracted 96,000 data files from IMF database using IMF api, and used pandas to derive insights related to sovereign debt defaults, using this data.
- Presented findings in live presentation to over fifty club members, and answered questions in following question period.

QuantumLumen Strategies

July 2023 - Present

Founder/Software Developer

Brampton, Ontario

- Collaborated with a team to develop simple applications tailored to small business clients' needs, enhancing user experience and engagement.
- Gained hands-on experience with front-end technologies such as HTML, CSS, and JavaScript, improving proficiency in creating visually appealing and responsive designs. Also gaining knowledge of backend using the node.js platform.

Projects

Adventure Video game | Unity, C#

January 2024

- Produced full fledged adventure video game, set in a medieval setting, including 12 distinct enemies, with various weapons and armour.
- Developed 24 C# scripts for the functionality of the game, including a damage system, raycast detection, cameras movement, and enemy ai.
- Learned unity tools including navmeshes, animator, and version control.
- https://github.com/pushpinderSekhon10/2Serious.git

PDF Application | Python, PyPDF

May 2024

- Developed python based pdf application
- Features include displaying/searching text, merging/splitting pdfs, adding images, encryption/decryption, bookmarks, and annotations.
- https://github.com/pushpinderSekhon10/pdfViewer.git

Quantum Gate and Semiconductor property Calculator | Java, JavaFx

May 2024

- Developed Gui based application to determine the probabilities of quantum circuits, and calculate the properties of different semiconductors.
- The application can calculate the probability of the outputs of a 3x2 quantum circuit, with 7 different quantum gates and 12 different properties of a semiconductor
- https://github.com/pushpinderSekhon10/ElectricalEngineeringCalculator.git

Technical Skills

Languages: Java, Python, HTML, CSS, JavaScript, C#, MATLAB

Developer Tools: VS Code, AWS, IntelliJ, PyCharm, Anaconda, Unity, Jupyter Notebooks **Technologies/Frameworks**: Jenkins, GitHub, numpy, Matplotlib, Keras, PyPdf, JavaFx

Extracurricular