Long Quan (Tony) Nguyen

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[LinkedIn](#) | [Personal website](#) | [GitHub](#)

EDUCATION

UNIVERSITY OF SASKATCHEWAN (USASK)   *May 2021 - May 2024*
Bachelor of Science, Computer Science, Mathematics minor. Average: 87   *Saskatoon, SK*
- ***Relevant Courses:*** Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Software Engineering & Management, Mathematical Modelling, Simulation Principles, and Applied Category Theory.
- ***Dean's Honours List:*** top 5% academic achievement of College of Arts and Science, 2022-2023.

EXPERIENCE

DEPT. OF COMPUTER SCIENCE, CEPHIL   *Aug 2023 - May 2024*
Undergraduate Research Assistant   *Saskatoon, SK*
Developed simulation models at CEPHIL - the USASK Computational Epidemiology and Public Health Informatics Laboratory, under the supervision of Professor Nathaniel Osgood. Utilized ***Anylogic***'s software for building and executing Agent-Based, System Dynamic, and Discrete Event models.
- Applied advanced mathematical concepts such as ***differential equations*** to formulate problems and reason through the model-building process.
- Debugged ***Java*** code, resolving issues, and improving the efficiency of simulation models.

COMPUTER SCIENCE STUDENT SOCIETY   *Feb 2023 - Dec 2023*
Member at Large   *Saskatoon, SK*
Served as an executive member of the USASK Computer Science Student Society. Facilitated study and Q&A sessions, addressing challenging computer science topics. Contributed to the planning and coordination of CSSS events.

TUTOR OCEAN   *Mar 2023 - Dec 2023*
Subject tutor   *Saskatoon, SK*
Served as a first-year Maths and Computer Science tutor within the USASK tutoring network. Assisted students in understanding complex topics such as Integrals, Derivatives, Data Structures, and Data Algorithms.
- Employed ***Zoom***, ***Google Meet*** and ***Microsoft Teams*** for remote tutoring sessions.
- Utilized mathematical graphing tools such as ***Desmos*** and ***Geogebra***, alongside ***draw.io*** and ***LaTeX*** documents, to effectively address problems visually.

PROJECTS

Oculus 3D Data Visualization
An Oculus-based tool for 3D visualization & manipulation of tabular data, built with ***WebXR***, ***React Three Fiber***, ***TypeScript***, and hosting with ***Firebase***.

Concentration Timer
A Google Chrome extension using ***JavaScript*** and Chrome extension APIs, enabling users to set time and notify users when the time goes off.

Local Network Terminal Chess
A PvP chess game playable over a local network directly from the terminal. Employed ***Python*** for the game logic and ***TCP*** for network connections.

Escape from Spinx
A 2D top-down pixel desktop game built using ***C#*** and the ***Unity*** engine.

TECHNICAL SKILLS

Languages: JavaScript/TypeScript, Java, Python, C, HTML/CSS
Technologies: React, NodeJS, Vite, MongoDB, Firebase
Developer Tools: Git, GitHub CI/CD, Jest, JetBrains IDEs, Unix/Linux

VOLUNTEER

AES Note Taker, USASK   *Sep 2022 - May 2023*
- Generated lecture notes for students with diverse needs. Supported four classes over two semesters.

Blood Donor, Canadian Blood Service   *Jan 2024 - now*