

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