# JIADI (TIAN) LUO

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## Education

Northeastern University | San Jose, CA, United States

Sep 2024 - Aug 2026 (Expected)

Master of Science in Computer Science

Simon Fraser University | Burnaby, BC, Canada

Sep 2020 - Apr 2024

Bachelor of Science in Computer Science

CGPA: 3.81

Relevant Courses: Data Structures/Algorithm, Operating System, Programming Languages, AI, Computer Networks

# Experience

7Sage
Web Developer Contractor

Vancouver, BC, Canada

May 2023 - Apr 2024

- Developed and maintained a responsive website for 200,000+ users using JavaScript/React/Vue, PHP, HTML, CSS, SASS, WordPress, MySQL, NodeJS, and Docker
- Led development of a key live classes feature using the WordPress plugin TEC, increasing monthly active users
- Improved large list and course loading speed by 60% through cache transient optimization
- Trained new team members and improved onboarding processes, contributing to a boost in team productivity

#### Web Developer Intern

 $Sep\ 2022 - Apr\ 2023$ 

- Worked closely with senior developers to enhance search and recommendation features for LSAT lessons by integrating OpenAI's GPT and embedding techniques with PineCone's cloud vector database
- Enhanced user experience by improving 40+ features such as LSAT exam statistics display, implementing highlighting, comment boxes, restructuring navigation
- Collaborated with QA to troubleshoot the statistical tool for calculating LSAT scores and fix legacy bugs

### Simon Fraser University | ixLab

Burnaby, BC, Canada

#### Research Assistant | Advised by Lawrence Kim

May 2023 - Aug 2024

- Led in-person lab studies and conducted usability testing to explore the influence of anthropomorphism, robot quantity, and motion patterns on human cognition and emotional responses
- ullet Controlled Toio and NAO robots using C# Unity scripts and Choregraphe for precise programming
- Developed an innovative AR-based solution to address stage fright in public speaking via HoloLens2

### **Publications**

- J. Luo, V. Domova, & L. H. Kim. 2024. Impact of Multi-Robot Presence and Anthropomorphism on Human Cognition and Emotion. *CHI '24.* https://doi.org/10.1145/3613904.3642795
- S. Pulatova, **J. Luo**, J. Lee, et al. 2023. Swarmfidget: Exploring Programmable Actuated Fidgeting with Swarm Sobots. *UIST '23*. https://doi.org/10.1145/3586182.3615806

# Projects (Selected)

## Divide and Conquer $\bigcirc$ | Java, Socket, TCP Protocol, Multi-threading

Apr - Aug 2023

- Led a team of 5 to develop an online multiplayer game with concurrent gameplay through shared object interactions and locking mechanisms
- Developed a Java client-server system through TCP sockets, with a UI built using the Java Swing library

#### myChannels $\bigcirc$ | C, Linux, Multi-threading, Scheduling, Operation System

Apr - Jul 2023

- Built a Linux OS from scratch, featuring a Kernel, Memory Management, File System, and interactive shell
- Kernel: Manages process life cycles through concurrent thread processing using the pthread library
- Memory Management: Implements dynamic memory allocation and synchronization for efficient resource handling
- Interactive Shell: Supports built-in commands like Is and configurable options for buffer size and thread count
- File System: Implements locking mechanisms for safe access to shared resources, enhancing stability

#### Technical Skills

Languages: Java, JavaScript, C++, C, C#, Python, HTML/CSS, SASS, SQL, PHP, Rust, Haskell Research Tools: Usability Testing, Quantitative and Qualitative Research, Survey Design, Heuristic Analysis, SPSS Developer Tools: MySQL, TablePlus, XAMPP, MongoDB, Git, Postman, GitHub, Docker, WordPress, OpenAI, NodeJS, React, jQuery, Bootstrap, Unity, IntelliJ, Figma, R, Matlab