Shuhao Fan

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ABOUT ME

Computer Engineering student at the University of Toronto, passionate about building intelligent systems that bridge real-world applications and cutting-edge research. My academic and professional experiences span full-stack development, AI-driven applications, and XR hardware-software integration. With a strong foundation in machine learning, computer vision, and systems design.

EDUCATION

University of Toronto

Aug. 2021 - May 2026

Bachelor of Applied Science in Computer Engineering, Minor in AI

Toronto, ON

- Dean's Honours List Recipient (2023)
- Relevant Coursework: Linear Algebra, Probabilistic Reasoning, Operating Systems, Algorithms and Data Structure, Computer Networks, AI/ML

EXPERIENCE

SOTI

Sep 2024 – Aug 2025

Software QA Developer (Intern)

Toronto, ON

- Designed and executed manual and automated test cases for major features, including multi-party support sessions, dynamic action menus and participant role systems
- Conducted stress and exploratory testing using JMeter and regression testing on front-end and back-end components to ensure product stability and performance under scale
- \bullet Contributed to optimization of WebRTC-based communication features, reducing backend query latency by 15% to support over 1M real-time users

FIBOS INC

Jul. 2025 – Aug. 2025

Data Analyst (WPE)

Toronto, ON

- Conducted industry research and data analysis on combustion monitoring technologies, producing improvement proposals supported by visualizations using Power BI
- Assessed potential industry applications and developed business cases—including cost-benefit and ROI evaluations—for adopting AI-powered combustion monitoring solutions

St. George Capital

June 2023 – Aug 2023

Software Developer (Intern)

Toronto, ON

- Developed a full-stack trading strategy analysis platform using Flask, Pandas, and React, enabling real-time evaluation of user-defined strategies
- Developed backend APIs to process and filter over 8 million CRSP entries, improving data handling efficiency for quantitative analysis

LongYou Network

June 2022 – Aug 2022

Software Developer (Intern)

Shanghai, CN

• Implemented dynamic hot update functionality in a Unity-based mobile game using C# and Lua scripting, enabling seamless content deployment without full app releases

Projects

BIRAD Clasification | *Python*, *PyTorch*

Sep 2023 – Dec 2023

 \bullet Led a deep learning project on BIRAD mammogram classification, achieving 75% accuracy with a stacked neural network and real-time prediction pipeline

GIS Mapper | C++, Git

Jan 2023 – May 2023

• Developed a full-stack GIS mapping app displaying real-time traffic, road, and weather data, optimized to boost map rendering from 70 to 120 FPS.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, TypeScript

Frameworks: React, Node.js, Flask, Angular, .net

Languages: Fluent in English & Mandarin