ALEX SHI

2B Honors Computer Science,
University of Waterloo

alexshi.me 🌐
alexshi0000
(416) 602-1990 ☎
/in/alexshi0000
yuanshi948@gmail.com ✉

SKILLS

Languages

JavaScript • Python • Kotlin
C++ • TypeScript • Java
HTML • CSS • SQL

Libraries / Frameworks

React • Redux • Flask
Node • Airflow • Spring

Essential Technologies

Git • Docker • Redis • Linux
PostgreSQL • MongoDB
LottieFiles • After Effects

ACHIEVEMENTS

Hack the North 🔗
Winning Team 2017

Canadian Computing Competition Senior
Ranked 99th Percentile, 2018
Ranked 94th Percentile, 2017

PennApps 🔗
Finalist of 2019

WolframAlpha Data Prize
York U Hacks 2019

EDUCATION

University of Waterloo
2018 - 2023
Candidate for B.CS,
Intended Minor in Economics

Relevant Courses

Software Org & Design, Object-Oriented
Development, Intro Alg Design & Data
Abstraction, Functional Programs

EXPERIENCE

Snaptravel // Software Engineer Intern
📅 January 2020 - April 2020

- Worked closely with operations team to create React views and components for a new internal tool used across Snaptravel's 2+ million users
- Built dedicated Flask microservice responsible for ppc advertising bidding, impacting ad placement at scale and top of funnel marketing
- Implemented webhooks that have handled over 3200 payment disputes, reducing number of fraudulent purchases
- Optimized UI experimentation framework, allowing UI variants to be invoked and QA'd in real time
- Engineered and maintained multiple ETL pipelines with Airbnb Airflow

Deloitte // Full-Stack Developer Intern
📅 May 2019 - August 2019

- Built blockchain applications in Kotlin with Spring, Hibernate, and H2
- Designed and built transaction monitoring dashboards with React - Redux
- Wrote Gradle tasks that streamlined project builds by 700%
- Spearheaded development of key security features such as live anomaly detection and reporting

Watonomous // Path Planning Engineer
📅 March 2019 - April 2019

- Worked in a design team aimed at building a level 4 autonomous vehicle
- Refined heuristics for A* algorithm, boosted path estimation accuracy
- Integrated simulation devtools for manual costmap parameter tuning

PROJECTS

j2csv // JSON Dataset Explorer 🔗
- Leveraged Lodash to extract tabular data from online JSON datasets
- Built an interactive SQL editor with sql.js, enabling users to filter useful data

AutoDeck // Dynamic Deck Generator 🔗
- Developed a Google Slides client for speakers to create slides as they talk
- Utilized Web Speech and Imgur API to generate slide pictures and text

Tetris AI // Evolutionary Algorithm 🔗
- Built a genetic algorithm capable of clearing 2000+ lines in classic Tetris
- Applied Minimax principles and multivariate testing to discover play styles