

SKILLS

Languages

- Proficient in Java, git, JavaScript, and C
- Familiar with bash, Python, C++, PHP, and SQL

Frameworks

- Express.js, Meteor.js, React.js, React Native, React 360 (formerly React VR), Qt

Competitive Programming

- Won multiple UT-wide programming and Capture-the-Flag competitions
- USA Computing Olympiad (USACO) Platinum Qualifier
- HackerRank Gold Problem Solving badge

EDUCATION

The University of Texas at Austin 2018 - 2021

B.S. in Computer Science
(Honors)

GPA: 4.0

- Member of **Turing Scholars** Honors Program
- Coursework: Architecture, Data Structures, Competitive Programming, Probability, Discrete Math
- Transferred Coursework: Intro to Systems Programming, Linear Algebra, Differential Equations I, II

EXPERIENCE

UT Information and Systems Security Society 2018 - Present

Engineering Officer

- Created Capture-the-Flag cybersecurity challenges for biweekly competitions for over 100 contestants on average
- Optimized LAMP services to handle many simultaneous penetration attempts
- Prepared talks over security techniques and best practices, including CSRF, XSS, injection, brute force, digital forensics

Forward Tutoring 2017 - 2018

Independent Software Engineering Contractor

JavaScript

- Built from scratch a new online tutoring platform using **Meteor** and **React**, leading to a ~**140% increase** in user registrations
- Coordinated the automated selection and scheduling of volunteer tutors, allowing a ~**50% increase** in tutoring availability and a ~**290% increase** in tutor engagement

Physics Department, SMU 2016 - 2017

Student researcher under Dr. Jingbo Ye

- Enhanced a 3D robotic arm by producing counterweights for height retention and created an intuitive front-end user interface using **Java Swing** for smooth operation
- Co-created a **Electron/WebGL** program used to visualize CMOS sensor data to aid detection of subatomic particles

PROJECTS

Carma 2019

Hands-free car-to-car communication

React Native

- Used the **SmartCar API** to track vehicle locations and characteristics, allowing drivers to dictate messages to specific nearby vehicles through **Google Cloud** Text-to-Speech and Speech-to-Text APIs

TetrisBrain 2018

Tetris implementation and AI

Java

- Used a **genetic algorithm** to generate a greedy algorithm to play Tetris with the goal of long term survival
- Able to clear hundreds of thousands of lines in one game