

Garrett Gu

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EDUCATION

The University of Texas at

Austin 2018 - 2021

B.S. in Computer Science

GPA: 4.0

- Member of Turing Scholars Honors Program

- Recipient of the 2018

Corbyn Salisbury Endowed Scholarship

- Coursework: Architecture, Data Structures, Competitive Programming, Probability, Discrete Math

The University of North

Texas (TAMS) 2016 - 2018

Graduated with Gold Cord and Honors diploma

GPA: 4.0

- Coursework: Systems Programming, Linear Algebra, Differential Equations I, II, and Complex Variables

SKILLS

Languages

- Proficient in Java, JavaScript, C

- Familiar with bash, Python, C++, PHP, SQL

Frameworks

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

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 AI to play Tetris with the goal of long term survival
- Able to clear hundreds of thousands of lines in one game

Forward Tutoring

2017 - 2018

Online live tutoring platform

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

EXPERIENCE

Physics Department, SMU

2017 - 2018

Student Intern

- Performed physics research with Dr. Jingbo Ye over novel methods of measuring dielectric properties
- 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 detect particles

EXTRACURRICULAR ACTIVITIES

UT Information and Systems Security Society

2018 - Present

Student Intern

- Created Capture-the-Flag challenges for biweekly competitions
- Prepared talks over security techniques and best practices