Garrett Gu

Student at the University of Texas at Austin, Computer Science 201 East 21st Street #M0847, Austin, TX 78705

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Experience

Physics Department, Southern Methodist University

06/2016-08/2016 06/2017-08/2017

Student Intern

- Collaborated in a group of 8 on summer physics research in the lab of 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-author of a **Electron/WebGL** program used to visualize CMOS sensor data to detect subatomic particles

Education

The University of Texas at Austin

Austin, TX

Pursuing B.S. in Computer Science

2018-2022

- Member of the **Turing Scholars** honors program
- Recipient of the 2018 Corbyn Salisbury Endowed Scholarship
- Completed **Data Structures**, Probability, and Discrete Math with **4.0 GPA**

Texas Academy of Mathematics and Science

Denton, TX 2016-2018

University of North Texas

- Graduated with **4.0 GPA**, Gold Cord, and Honors diploma

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

Projects

TetrisBrain

Java

Tetris Implementation and AI

09/2018-10/2018

- 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

07/2017-07/2018

Online live tutoring platform

- Built from scratch a new and improved website and online tutoring platform for **Forward Tutoring**, a 501(c)3 nonprofit that provides unlimited free tutoring, leading to a 140% increase in user registrations
- Coordinated the selection and scheduling of qualified volunteer tutors, allowing a 50% increase in tutoring time and a 290% increase in tutor engagement

Extracurricular Activities

UT Information and Systems Security Society

12/2018 - present

Engineering Officer

 Responsibilities include creating Capture-the-Flag challenges for biweekly competitions and preparing talks over security techniques and best practices

Skills

- Languages:
 - Proficient in Java, C++, JavaScript, C
 - Familiar with bash, PHP, SQL, Python
- Frameworks: Express.is, Meteor.is, React.is, React 360 (formerly React VR), Qt