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

Lead Software Developer

07/2017-07/2018

Forward Tutoring

- 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

Student Intern

06/2016-08/2016

Physics Department, Southern Methodist University

06/2017-08/2017

- 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
- Currently enrolled in **Data Structures**, Probability, and Discrete Math

Texas Academy of Mathematics and Science

Denton, TX

University of North Texas

2016-2018

- Graduated with **4.0 GPA**, Gold Cord, and Honors diploma
- Completed Systems Programming, Linear Algebra, Differential Equations I, II, and Complex Variables

Projects

${\bf RandomWriter}$

Java

Predictive Text Engine

09/2018

 Used Markov Chains and hash tables to generate new text output that mimics the properties of a large amount of source texts at both the character and word level

UNT Grade Distributions

JavaScript

www.untgrades.com

06/2018-07/2018

- Improved a grade distributions website by replacing the database with a locally cached NeDB database
- Generated **over 90% faster** initial look-up times with similar server loads

Skills

- Languages:
 - Proficient in Java, C++, JavaScript, C
 - Familiar with bash, PHP, SQL, Python, LATEX
- Frameworks: Express.js, Meteor.js, React.js, React 360 (formerly React VR), Qt
- Other technologies: git, webpack, Docker, Arduino, UML