

Grant Skaggs

☎ 713-548-4854
✉ grant.skaggs@outlook.com
Site: grantskaggs.com

Education

May 2022 **University of Texas at Austin, Turing Scholar Honors Program**
B.S. Computer Science & B.S. Mathematics; **GPA: 3.97**

Experience

Present **Duolingo, Software Engineering Intern**

Summer 2019 **University of Texas at Austin, Undergraduate Research Assistant**

- Applied recurrent neural networks to the problem of cache data prefetching in modern computer architectures
- Working under Dr. Calvin Lin, developed and tuned a two-layer LSTM neural model using TensorFlow and Python to predict prefetched addresses

Mentorship

Fall 2020 **UT Computer Science Department, Pod Mentor**

- Will lead a small group of first year CS students in a weekly seminar to help build CS community and connect students to CS-specific resources

Summer 2019 **Austin Chinese Educational Services, Course Instructor**

- Led introductory Python and Scratch courses for elementary and middle school students; designed the course objectives and curriculum; taught daily lectures; helped students with their course projects

Projects

June 2019 - **RayTracer, C++**

Jan. 2020

- Developed a ray-tracer in C++ to render 3-Dimensional scenes
- Implemented features: Polygonal meshes, 3D object rotation/distortion, recursive reflection and refractions, point and directional lighting, multithreading, variable material types, shadows, specular and diffuse shading

Dec 2018 **Webcrawler, Java**

- Designed a Java application for web crawling, page indexing, and search
- Included a graphical user interface, page-ranking features, and a robust web query parser

Spring 2018 **Plexus, Java**

- Designed and built a 2D side-scrolling PC game in Java
- Finished Top 15 at the BPA Nationals Software Engineering Team competition

Skills

Proficient Languages: C/C++, Java, Python, Git, Swift, Bash

CS Coursework: Algorithms, Data Structures, Operating Systems, Computer Architecture, Discrete Math, Computer Graphics, Competitive Programming, Research in Computer Architecture

Honors / Awards

Academic: National Merit Scholar, National AP Scholar, Phi Beta Kappa Scholarship, CLHS Valedictorian

STEM: AIME Qualifier, Science Olympiad Gold Medalist, USACO Gold Ranking