

KEVIN JIN

kevin.jin@utexas.edu | kjin2010.github.io | 832.740.0528

EDUCATION

The University of Texas at Austin

Austin, TX

B.S. Mathematics, Computer Science; Turing Scholars Honors Program

August 2019 - May 2023

Cumulative GPA: 3.86/4.00

Coursework (= honors):* Algorithms*, Data Structures*, Computer Architecture*, Operating Systems*, Data Mining*, Computer Graphics*, Discrete Math, Linear Algebra, Real Analysis, Probability

EXPERIENCE

Rubrik

Palo Alto, CA

Software Engineer Intern - Infrastructure

May - August 2021

- Designed and trained machine learning and statistical models to predict internal resource order flow
- Implemented a framework from scratch to easily integrate any prediction model into the order fulfillment pipeline
- Built a simulator to monitor performance - lowered order latency by 65% and cut resource carryover costs by 40%

UT Department of Computer Science

Austin, TX

Undergraduate Researcher

May 2020 - Present

- Researched and analyzed different reinforcement learning techniques for robotic dexterous manipulation tasks
- Implemented a novel "curiosity-based" algorithm for better generalization to unknown objects
- Created testing pipelines to gather metrics on new models - saw decreased training time and improved performance

Integeos LLC

Houston, TX

Software Engineer Intern

May 2018 - August 2019

- Wrote image processing algorithms to perform automatic identification of unique features within seismic images
- Designed discriminatory networks to identify seismic anomalies, saving 50+ man-hours and increasing accuracy
- Created a company webpage to display experimental results, increasing website traffic by 150%

PROJECTS

AnimateIt *Physical animation tool*

Typescript

- Implemented browser-based animation tool that allows for efficient object-skeleton manipulation and animation
- Created physics engine to support cloth rendering, collision detection, light, gravity, and wind

Accelerated Ray Tracer *Ray traced scene renderer*

C++

- Built an application that renders ray-traced scenes with translucent, reflective, refractive, and opaque objects
- Added features like normal mapping for realistic textures and anti-aliasing for improved image quality
- Utilized data structures like BVH trees and k-d trees to massively improve efficiency and rendering speed

CoronOS *Features for custom virtualized OS*

C/C++, assembly

- Designed and built process ID infrastructure for signals, thread pooling, and increased kernel security
- Implemented memory mapping and page tabling schemes for processors and to support context switched memory
- Allows for encrypted and concurrent file reads, writes, and access permissions through custom kernel system calls

AWARDS AND ACTIVITIES

Turing Scholars Student Association *Member*

August 2019 - Present

- Academic organization that hosts CS related talks, events, and research opportunities

UT Programming Contest (UTPC) *Member, Contestant*

September 2019 - Present

- Competitive programming organization that hosts monthly programming competitions and talks

American Invitational Mathematical Examination *6-time qualifier*

2014 - 2019

- Invitational math competition for top 5% of scorers on AMC 10/12

LANGUAGES & SKILLS

Proficient Java, C/C++, Python

Exposure Typescript, Haskell, Rust, SQL, Javascript, CSS, html, Pytorch, Docker, Django

INTERESTS

Ultimate Frisbee: Practiced with 15 person team three times a week; UT intramural semis (2019), finals (2020)

Baking: Maintained sourdough starter for 20+ months to bake bread weekly; experimented with pies and pastries

Running: Trained for and participated in 5k and 10k races (Grant-A-Starr, Foam-Glow, Houston Turkey Trot)