

Fu-Yao (Jefferson) Yu

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Education

The University of Texas at Austin

Austin, TX

Bachelor of Science in Electrical Engineering Honors | Minor in Business. Overall GPA: 4.0

Aug 2021 – May 2024

Relevant Coursework: Assembly/C, Embedded Systems, Data Structures, Algorithms | Management, Accounting

Lawrence E Elkins High School, Fort Bend ISD Engineering Academy

Missouri City, TX

Valedictorian in class of 633; GPA: 4.0, SAT: 1580, ACT: 36

Aug 2017 – Jun 2021

National Merit Scholar; Two-time Winner of the Texas Inventathon; Top 3 Winner at HP CodeWars

Work Experience

Samsung - GPU Software Engineering Intern

Austin, TX

- Built 4 image validation tools to provide comprehensive reports to the SARC Compiler Team

May 2022 – Aug 2022

- Analyzed runtime and complexity of 12 graph algorithms by integrating implementations from open-source libraries

- Partook in Programming Language Design presentations to grasp nuances of C, C++, Java, and other languages

QED Energy Associates - Data Science Intern

Houston, TX

- Led a project over analysis of oil & gas production in the Gulf Coast Region with 4 fellow interns

Jun 2020

- Compiled data from 3 databases and created visualizations using Excel and Python Matplotlib

- Presented findings about trends in horizontal drilling technology. Awarded Intern of the Year

Applied Automation and Controls, Inc. (AAAC) - Mechanical Engineering Intern

Houston, TX

- Devised digital models of parts using Autodesk Inventor to fit client constraints

Jul 2019

- Manufactured parts using CNC machinery and tested part compatibility with other components

Projects

importify

Austin, TX

- Created a web app to ease media migration for Spotify users. HTML/JS, Python (Flask), Jinja, Heroku

Dec 2021

Elkins High School TMSCA Math Contest - Lead Organizer & Developer

Missouri City, TX

- Coordinated a math contest with 500+ contestants and 200+ volunteers from scratch

Dec 2019 – Jan 2020

- Digitized contest by programming a web application (HTML/JS/CSS) to automate registration, grading, and scoring

- Raised over \$9,000 in revenue for community math programs. Digitalization improved time efficiency by 300%

Anne Sullivan Elementary Math Club - Club Founder and Lead Coach

Sugar Land, TX

- Taught students 3x/week. Earned the title of 2018 Mathleague.org National Champion Team

Aug 2016 – Jun 2021

- Programmed a practice problem generation website to increase accessibility of study materials

- Strengthened math skills for 200+ young students across 4 nationally-ranked elementary school teams

Leadership, Community Involvement, & Awards

Society of Asian Scientists and Engineers - Vice President External

Dec 2021 – Present

Society of First-Year Engineers - Logistics Committee Lead

Aug 2021 – Jun 2022

SEC Annual Case Competition, First Place

Nov 2021

Taiwanese-American Students Association - Member

Aug 2021 – Present

High School Math and Science Club - President and Team Captain

Apr 2018 – Jun 2021

UIL State Mathematics Competition, Second Place

May 2021

American Mathematics Competitions (AMC10/12), International Honor Roll

Jan 2018 – Feb 2020

Skills & Interests

Programming: Java, Python, JavaScript, HTML/CSS, C, C++, Assembly

CS50 (C, Python, SQL) Certification, awarded by Harvard University

Software: Microsoft Office, AutoCAD, Autodesk Inventor, Adobe Photoshop, Adobe Premiere Pro

Languages: English (fluent), Mandarin Chinese (fluent), Spanish (intermediate)

Interests: Piano, Typing (160wpm)