Ethan S. Yu

ev21@rice.edu | 305-927-8304 | Houston, TX

EDUCATION

Rice University, Bachelor of Science in Computer Science, Data Science Minor

Houston, TX June 2026

Coursework: Computational Thinking, Algorithmic Thinking, Computer Systems, Parallel and Functional Prog, Multivar Calculus, Lin. Algebra, Program Design, Statistics, Advanced Data Structures, Databases, Networks

WORK EXPERIENCE

StudyFind *Software Developer Intern & Chapter Leader*

Houston, TX May 2023 - December 2023

- -Building a platform for Researchers and patients to communicate, especially for long term research projects.
- Leader for Full stack web dev, coordinating with other universities, planning from inception to completion.

Intra Drain Alert Network *Team Leader*

Houston, TX August 2022 - December 2022

- -Worked for and was sponsored by Rice Office of Sustainability and the OEDK for a semester
- -Built water leak detector that measured flow rate, sent staff emails if there was a leak, and stored data for future use.

Office of Information Technology Lead Student Consultant

Houston, TX May 2023 - Present

-Leading students to help other Rice Students through troubleshooting their code, software, and technological issues.

PROJECTS

Python Code Autograder (Java)

November 2023

-Used Java to implement a greedy version of the hitting set problem, read and run python programs in Java, and built a parser using a modified recursive descent algorithm to make this autograder

Third Person Shooter (Godot, GDScript, C)

June 2024

-Built a physics based shooter with complex mechanics and enemies with artificial intelligence, using existing assets **Notification System (Python, Selenium, Firebase)**

-Built a notification system for my Co-workers and I, decreasing our time per response from 3 hrs to under 1 hr

2D Fighting Platformer (Godot, GDScript, C))

June 2024 - Present

-Developing a dynamic 2D fighting platformer, integrating complex mechanics, engaging gameplay, and original art Tsh Shell (C) March 2024

-keep of track of processes, stop on ctrl-c, and executes built in cmds (using signal handlers/exceptional control flow) February 2024

Unix we function (C)

-used C to take in multiple files and outputs their word, character, and line count and prints in alphabetical file order Chat App (React, Redux, Firebase) June 2023

-database to build a chat app with multiple subchats.

Mammography resource allocation (Python)

February 2022

-Used Pandas and created a Choropleth map to show where Mammography resources would have the highest impact **Stock Predictor (Python)** September 2022

-Used Python to model Markov chains to predict future stock prices of First Solar, Google, and the Dow Jones.

Optimizing Distances on Maps (Python)

November 2022

-Used Python to find shortest routes between places around Rice using A*, DFS, and BFS Algorithms

Targeted attacks on Networks (Python)

February 2022

-Used Python to simulate targeted and random attacks on UPA and Erdos Renyi Network systems.

LEADERSHIP EXPERIENCE

StudyFind Club Rice Co-President

August 2023 - December 2023

-Started the StudyFind Club at rice, plans fundraisers, recruitment events, coordinate with Rice Professors

StudyFind WebDev Team Project Manager and Chapter Leader

August 2023 - December 2023

- -Led a group of software developers using scheduled team meetings through Zoom and individual meetings
- -Made sure everyone knew their task and objective while making sure they were not overwhelmed.

Intra Drain Alert Network Project Manager and lead software developer

August 2022 - December 2023

- -Led a team of student engineers from project inception to completion of a prototype
- -Able to delegate tasks to teammate, create deadlines, and communicate between the team and our client

SKILLS

Programming Languages: Python, Java, C/C++, C#, GDScript, MATLAB, HTML, CSS, Javascript, React, Firebase **Other Skills**: Godot, Git, Github, Arduino | **Languages**: English | Mandarin | Greek | Japanese