

# Will Farhat

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## Education

### University of Southern California – Viterbi Engineering and School of Cinematic Arts

Graduating May 2025

Bachelor of Science in Computer Science and Games - 3.96 GPA

Honors: Dean's List, CURVE Research Fellowship, Trojans Affiliates Scholar

### Harvard-Westlake High School

June 2021

## Experience

### Bloomberg LP - Software Engineering Intern

May 2022 - August 2022

- Rebuilt the entire Bloomberg Businessweek homepage in NextJS/TypeScript; used by over 10 million unique monthly users
- Worked with senior engineers to design a new system for hydrating and rendering all content on Bloomberg.com; deployed sitewide with Jenkins and AWS to 50 million unique monthly users and increased client-side performance by up to 2.5 times

### NASA SUITS Team Aegis - Terrain Team Lead and Engineer

January 2022 - Present

- Serving as a team lead of a 70-person group selected by NASA to build a concept HoloLens AR HUD for Lunar moonwalks
- Constructing data processing and visualization pipelines for 17km of Lunar terrain with Python, C#, and Unity
- Pitched our finished prototype directly to a panel of 30 NASA officials and scientists at Houston Space Center

### BodyAI - Software Engineer, Part Time

February 2022 - Present

- Programming a full stack glucose monitoring app with Typescript, React Native, Node.js, and Firebase
- Managing CI/CD pipelines with GitHub Actions and Heroku for deployment to 3 concurrent platform targets
- Collaborating with a SCRUM team across 2 continents to rapidly ideate and iterate on the core product

### USC One World Terrain Project - Undergrad Research Fellow

August 2021 - May 2022

- Developed a Linux-based data augmentation tool using CUDA, Python, and CloudCompare to triple machine learning dataset coverage for 3D point cloud segmentation techniques
- Researched and benchmarked 8 new machine learning techniques for 3D point cloud segmentation

### USC QED Research Lab - Software Engineering Extern

February 2021 - May 2021

- Developed Multi-Modal Visualizer, a Python visualization tool for medical time-series data, in 5 weeks
- Interviewed 6 lab researchers and ensured the tool fulfilled their primary needs of data concurrency and legacy support
- Configured automated deployment in Docker and Kubernetes to remove the need for manual setup

### Tiny Headed Kingdom - Freelance Full-Stack Developer

July 2020 - January 2021

- Designed Tiny Headed Game, a multiplayer game for the company's Holiday 2020 marketing campaign
- Deployed game with Node.js, AWS EC2 for CI/CD, and Firebase to more than 800 players worldwide

## Involvement

### Engineer, USC Rocket Propulsion Laboratory

November 2021 - Present

- Building authentication and inventory infrastructure with Java, TypeScript, and Google OAuth; used by over 300 members
- Supporting hands-on integration at semi-annual rocket launch campaigns in the Mojave Desert

### Organizer and Instructor, HW Inc

November 2018 - June 2021

- Organized and taught at Harvard-Westlake's 45-person annual entrepreneurship camp for 3 years
- Designed and programmed an online social hub in 3 weeks during the pandemic to support 100 participants and alumni
- Presented each year's progress to audiences of up to 300 people

### Computer Science Mentor, Leaders United for Change

March 2020-June 2021

- Oversaw online Python tutoring sessions through Zoom for over 50 middle school students
- Wrote and taught a 6-week summer program about Python, HTML, and Machine Learning to 60 students

## Skills

- Python, JavaScript/Typescript, C++, C#, Java, GLSL
- React, NextJS, React Native, Node.js, ExpressJS, TailwindCSS, Storybook, OpenCV, TensorFlow, CUDA, Unity, GameMaker
- Linux, Git, Jira, AWS S3/EC2/Elastic Beanstalk, Jenkins, Firebase, MongoDB, GraphQL

## Projects

- Writus** – mobile word search game published on iOS; winner of HackSC 2022
- FreehandVR** – marker-less VR hand-tracking prototype using C#, Python, and OpenCV
- Willfarhat.com** – full-stack website hosted on Linux and built with NextJS / React, TypeScript, and Node.js