Will Farhat

469 California Terrace, Pasadena, CA 91105 | (626) 361-3282 | willf668@gmail.com | willfarhat.com

Education

Bachelors of Science, Computer Science   **May 2025**
University of Southern California

High School Diploma   **June 2021**
Harvard-Westlake High School   4.43/3.89

Skills

- C++, C#, Python, Java, JavaScript, Typescript
- Node.js, React, OpenCV, TensorFlow
- Git, Unity, Unreal Engine, AWS EC2/S3/Elastic Beanstalk, Docker/Kubernetes, GameMaker

Work Experience

Undergrad Research Fellow   **August 2021-Present**
USC One World Terrain Project, Los Angeles, CA
- Working with the Department of Defense to map environments using deep learning and point cloud segmentation
- Researching existing solutions and performing comparison tests between different DL models
- Building artificial environments with Unreal Engine for additional training data
- Writing research papers on new advancements in photogrammetry and segmentation techniques

Software Engineering Extern   **February 2021-May 2021**
USC QED Research Lab, Los Angeles, CA
- Developed Multi-Modal Visualizer, a data visualization tool for medical researchers to analyze time-series sensor data
- Built with Python, React, the TIG Stack (Telegraf, InfluxDB, Grafana), and Kubernetes

Freelance Full-Stack Developer   **July 2020-January 2021**
Tiny Headed Kingdom, Studio City, CA
- Developed Tiny Headed Game, a multiplayer video game for the company's Holiday 2020 marketing campaign
- Built with Node.js and PHP (backend), GameMaker Studio 2 (frontend), AWS (Hosting), and Firebase (DB)
- Managed server CI/CD during the game's rollout; final product played by over 800 users

Involvement

Organizer and Instructor, HW Inc   **November 2018-June 2021**
- Co-led Harvard-Westlake's 45-person annual entrepreneurship camp for 3 years
- Taught workshops on competitive landscapes, branding, and MVP development
- During the Covid-19 Pandemic, designed an online hub allowing participants and alumni to communicate through a multiplayer recreation of the school library

Computer Science Mentor, Leaders United for Change   **March 2020-June 2021**
- Supervised online Python tutoring sessions through Zoom for over 50 middle school students
- Wrote and taught a 6-week summer program about Python, HTML, and ML to 60 students

Projects

- **ReMotion** – 3D positional tracking software for game design
- **MMOMaker** – open-source MMO framework for GameMaker Studio 2
- **Coffeehouse** – WebRTC powered conference calling for music sharing and virtual jam sessions

Honors and Awards

- **USC CURVE Fellowship**, 2021-2022
- **Silver Medal**, Scholastic Art & Writing Awards, 2020