

Ahmed Abo-Shadi

alias *VisualPlugin* — 2026-02-11T09:37:55.398Z

+1 (714) 463 5142

<https://linkedin.com/in/visualplugin>

<https://github.com/Windows81>

aboshadi.n.ahmed@gmail.com

Education

California State University, Fullerton - 2024 thru now

- Pursuing a MS in both Computer and Civil Engineering
- Having a solid foundation in how software works at a high level serves me for certain purposes.
- *Computer Engineering*: Learning about how to manipulate hardware helps me solve even more pressing technical issues.
- *Civil Engineering*: The field pays well. It also helps to learn these disparate industries well enough to know how to bridge them and make good for myself and society.

University of California, Irvine - 2020 thru 2024

- Completed a BS in Software Engineering with a GPA of 3.671.
- For a year in 2022, I participated at ACM club meetings,
 - Where I presented (at times) my solutions for *easy* and *medium* LeetCode problems to an audience of various skill levels.

Santiago Canyon College - 2018 thru 2020

- Majored in Computer Science in preparation for a transfer to UC Irvine; graduated with an AA in Liberal Arts.
- Achieved a 4.0 GPA for major-related courses.

Projects & Research

Rōblox Freedom Distribution - July 2023 thru now

- <https://github.com/Windows81/Roblox-Freedom-Distribution>
- I have been developing games on Rōblox from 2013, having had an account since 2008.
- At the time, the company was a small Silicon-Valley start-up.
- Over the years, its developer-friendly tools led me to take up my current-day career as a programmer.
- From 2023, I've built a scalable application for users to *host* and *join* self-hosted, historic versions of Rōblox in a local- or wide-area network.
- Created a Python bootstrapper, dually for end users and custom backends, for seamless connectivity
- Enhanced functionality through team collaboration, code reviews, and feature development.
- Evaluated fair-use compliance by auditing business-legal literature.

• Frontend Developer at Gameln - Sep 2023 thru Mar 2024

- Before graduating from UC Irvine, I took a capstone course where I collaborated, among classmates, with one of a choice of several companies.
- Owing to my prior experience in videogame development, I chose to work with Gameln, who were building a tool to match e-sports streamers and paying sponsors.
- Implemented mobile-user-friendly pages using Next.js (and thus React) from mockups that we also made.
- Arranged, as part of a team, a slide deck with stylistic help from Figma.
- The slide deck was presented to an audience of approx. 50 other students and their families.

• Bring Back Buffets - March & April 2021

- <https://github.com/Windows81/Bring-Back-Buffets>
- During the Covid lockdowns, I engineered a mobile web app to revive buffets whilst minimising infection risk.
- This project's user-interaction model drew inspiration from how some Korean barbecue establishments operate:
- Where dine-in customers can order food directly from a website they can access from their phones.
- I built separate user interfaces for customers, cashiers, and back-of-house staff, with step-by-step documentation for setup.
- Although the project is fully developed, I was unable to secure clients.

• GoAnimate Wrapper - Dec 2019 thru Nov 2020

- <https://github.com/GoAnimate-Wrapper/GoAnimate-Wrapper>
- Using GoAnimate's *Legacy Video Maker*, I animated some engaging videos on my YouTube channel, often satirising trends set forth by other publishers who use the same tool.
- However, it needed a remote server for file persistence and access to crucial assets, which was being discontinued after 2019.
- A newer version of the program existed, but lacked crucial animation assets and effects.
- GoAnimate Wrapper is a server-backend application designed to interop with Vyond's Legacy Video Maker.
- Reverse-engineered Flash files and analysed legacy ActionScript code.
- Created and scaled a modern Node.js interface replicating GoAnimate's back-end functionalities.
- With a team of experts managing the community up to this day, Wrapper became my most popular application.
- Because of the need that it filled, my tool delivered hundreds of engaging video experiences.
- By May 2021, over 21,000 results would appear on a YouTube query for Wrapper and its successors.

• Rōblox Script Executor - July 2022 thru May 2023

- <https://github.com/Windows81/Roblox-Script-Executor-CLI>
- was a command-line interface facilitating script execution on Rōblox.
- Constructed custom syntax for script execution in Lua
- Introduced per-script parameterization for user ease
- Created 142 predefined scripts in a sister repository, many with help pages

• Tubeup - Aug 2023

- <https://github.com/bibanon/tubeup>
- I use a variety of tools, most of which I install from GitHub, to automate tasks that would otherwise take me months to complete.
- Though, some do have bugs requiring manual intervention.
- To mitigate the risk of losing my YouTube videos due to shifting policies, I used a program to re-upload my YouTube videos to the Internet Archive.
- I reviewed and contributed code to facilitate this process.
- After exploring yt-dlp's Python interface and fixing bugs for a batch of 234 videos, I developed a mechanism to skip deleted videos.
- Unlike most of my other contributions, these fixes were quickly accepted in a pull request.

• "ScrewDja YuJa" - Dec 2022

- <https://github.com/Windows81/ScrewDja-YuJa>
- I discovered and disclosed a severe vulnerability in YuJa's API.
- *Millions* of private videos, including recordings of students taking proctored exams, were exposed on the open net.
- After sending the initial message, I was put directly in touch with the Chief Business Officer.
- YuJa released a security patch after ~2 days, closing the loop-hole for good.

• Time is Musical - May 2021, Feb 2022

- <https://github.com/Windows81/Time-Is-Musical>
- is a musical adaptation of the WWV time station
- Streamed live on YouTube using FFmpeg's lavfi filter
- Mastered, mixed, and reproduced a composition of five tracks
- Devised an algorithm to uniquely select playing loops per minute
- Produced 42 synth loops using FL Studio 20
- Constructed Python script for stream parameters

• Webhooky - Feb 2018 thru Sep 2019

- <https://github.com/Windows81/Playing-Webhooky>
- was a lightweight, database-driven webhook proxy for Rōblox games interacting with Discord's webhook API.
- Made use of PHP, SQL (MySQL), and PHPMyAdmin to process and store request logs
- Empowered over 200 game developers to transfer data to Discord with my service
- Monitored and tracked infrastructure usage stats on cPanel via 000webhost

Employment

• On-call Designer @ Islamic Institute of Orange County et al. - April 2016 thru now

- Controlling graphic design for printed and digital materials for social events using Affinity Photo and Canva, ensuring brand consistency and on-time delivery.
- Creating marketing copy for affiliated non-profits such as Sabil USA, BSA Scouts, and Girl Scouts of America.
- Matching design language with existing literature and coördinating with print shops, reducing revision.
- Additionally, designed real-estate visuals for agents contracted by Berkshire Hathaway.

• Internship @ CSU Fullerton - Sep 2017 thru May 2018

- Analysed *my first* proper code base and documented findings that helped the team streamline future development.
 - Supported graduate students in building a Java-based brain-computer interface targeting users with limited mobility.
 - Coordinated with Professor Kiran George under the Val Tech Program to log internship hours, ensuring that I and the research team met our reporting requirements.
 - My assigned task:* To design a mock user interface for initial calibration procedure.
-
- Salient Moment:** I identified and took the initiative to solve issues which were outside my purview.
 - During a meeting, I overheard that the researchers were facing challenges in accessing a specific data structure obscured by dependency code, which blocked their analysis.
 - I located the data structure in a private variable buried in a library class.
 - To add some spice, I drafted a digital illustration showing the variable's name and presented that to the group.
 - However, my solution was not actionable as it required changes to the dependency code and overlooked other project needs.

• Engineering Assistant @ Professional Engineering Center - June 2015 thru now

- Provisioned and responsible for maintaining sensitive on-site file servers with Samba, enabling secure file access for the engineering team.
- Additionally, digitising drawings to AutoCAD, which are then reviewed and analysed by a licensed civil engineer.
- Supporting the construction and repair of commercial and industrial sites by clients, including multi-national manufacturers and regional utility providers.

• Raising Cane's and El Pollo Loco - Aug 2019 thru June 2021

- Communicated with customers and team members in a fast-paced environment.
 - Operated drive-thru and dine-in cash registers, processing orders through the POS system and supporting overall restaurant operations.
 - Helped maintain steady order throughput during peak hours.
-
- Salient Moment:** I resolved a customer's vehicle breakdown in the drive-thru lane by coordinating with staff and safely clearing the path, allowing service to resume promptly and preventing service delays.
 - One busy evening, I noticed that a car was stuck on the path.
 - Upon seeing the issue, I approached nearby drivers and asked if any had jumper cables and found one who came prepared.
 - I requested that other customers yield before a shift manager transitioned to handle drive-thru orders and took over from there.

Listed Skills

- Python
- C++
- Rust
- Node.js
- HTML5; CSS3
- PHP
- Roblox Lua(u)
- x86 Assembly

- MongoDB
- MySQL
- Next.js; React
- Docker Compose
- Git; GitHub
- GNU/Linux
- Bash
- PowerShell
- Android/Linux
- FFmpeg

- Affinity Photo
- FL Studio
- OBS Studio
- Filmora 13
- VS Code; VSCodium
- Documenting Stuff
- Microsoft Office