

BRIAN WANG

Portfolio Website + GitHub + LinkedIn: <https://linktr.ee/briantruefalse>

EDUCATION

University of California, Berkeley

Electrical Engineering and Computer Science

PROFESSIONAL EXPERIENCE

Virtual Medical Missions CS Lead Intern | Now CS Mentor

July 2024 - Present

- Managed project timelines, reducing delivery times by ~30%.
- Developed Website & EMR system back-end utilizing Quart/Flask Python, PostgreSQL
- Collaborated with cross-functional teams, enhancing project success rates by ~70%.
- Stayed when CS team collapsed; held workshops & revitalized project operations after team collapse.

Lead Game Developer | Agile Studios

July 2022 - Present

- Lead indie game studios Agile Studios, accumulating over 60k views on YouTube
- Wrote 10k+ lines of code with over 200+ hours of development
- Lead 10+ team members at studio's peak
- Started a Community server with over 200+ members

3D Game Developer Intern | Coding Stem Academy

Feb 2024 - May 2024

- Taught high school students Unity, Gimp, C#, and game design principles
- Improved course efficiency & student outputs during one full teaching cycle in the academy
- Led & mentored 20+ students in delivering completed game projects for IgniteCS before due date.

Encryption Algorithm Researcher | eSTEM Academy SERP

Sep 2022 - Oct 2022

- Encryption/decryption of bits by mirroring & half/full reversals horizontally/vertically
 - Full project research paper presented to eSTEM Academy & Congressional App
 - Led teams of 3 & 4 (respectively) with a co-developer
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PROJECTS

Empath AI: Fine-tuned Text-Generation AI Model Therapist for Emotions

- Trained Mistral-7B on 100+ lines using 85k+ lined HuggingFace Datasets over 7+ hours on 1x RTX 3060 GPU
- Accelerated generation speeds 4x via batching, FlashAttention 2, pinned memory, and non-blocking transfer
- Built full-stack app with Next.js frontend and FastAPI backend, supporting input from 9 languages

CVision: Serverless Resume Screening

- Built a full-stack resume analysis platform using Next.js, FastAPI, AWS Lambda, S3, and DynamoDB
- Parsed and screened resumes with keyword and regex-based logic in Python with 5+ pattern recognitions
- Full-text analyses responses in 5s (measured with informal tests using Python timers and demo videos)

Food Image AI Predictor

- Trained an image classifier with TensorFlow/Keras on 22,000+ images, achieving ~95% test accuracy
- Used Edward Zhang's Fruit-360 dataset; tested on 1,600+ images across 30 training epochs
- Preprocessed and augmented datasets to improve generalization and class training

NaviGaze: Python-based AI Assistance for Computer Navigation using Speech & Facial Detection

- Engineered a real-time speech and head-tracking assistant in Python, enabling full hands-free PC control
 - Implemented real-time facial detection (Mediapipe) and voice command parsing (SpeechRecognition)
 - Controlled GUI elements with PyAutoGUI, enabling accessibility use cases for users with limited mobility
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TECHNICAL SKILLS

- **Languages:** Python, Java, C++, Dart, JavaScript, JSX, SQL (PostgreSQL), LuaU
- **Frameworks/Tools:** React, Next.js, Flask, FastAPI, AWS (Lambda, S3, DynamoDB), Flutter, Git
- **Other:** Project Management, Structural Analysis, Robotics, CAD | Google Certs (Cybersecurity, Python, IT Support)