ETHAN LEGUM ethanlegum@gmail.com www.ethanlegum.com









EDUCATION

Aug 2022 -Current

The University of Central Florida Orlando, Fl

M.S. in Computer Vision | GPA 3.8

• Top Courses - Advanced AI, Machine Learning, Computer Vision

Aug 2017 -May 2022

The University of Central Florida Orlando, Fl

B.S. in Computer Science | GPA 3.5 | Core CS GPA 3.9

- Top Courses AI, Robot Vision, Parallel Programming, CS 1 & 2, and Computer Security
- Dean's List 7 Semesters

PROJECTS

Sep 2022 -Dec 2022

Credit Card Fraud Detection Python

Architected machine learning pipeline that efficiently detects fraud using real European consumer credit card data

- Optimized classifier using AUROC score to achieve 98% separation of fraudulent and non-fraudulent data.
- Applied regularization to stabilize model and raise accuracy by 22%.
- Balanced dataset of 300,000 credit card transactions by artificially creating more fraudulent data using SMOTE.

Aug 2021 -April 2022

EasyMeshVR C#, Unity, NodeJS, AWS

Developed multiplayer VR application that allows users to collaboratively edit 3D models.

- Led 5-person team in building mesh-editing, multiplayer, and web architecture to launch application in 6-month period.
- Implemented UI that eliminated motion sickness in users by communicating mesh state through colors.

Feb 2021 -April 2021

Nutrition Intuition JavaScript, HTML, CSS

Created web app that allows users to track nutritional value of their food and provide healthy eating suggestions.

- Managed 6-person team in designing, programming, and presenting web and mobile platforms within 10 weeks.
- Deployed secure implementation of MERN stack, including managing non-relational database using NoSQL.

Jan 2018 -May 2018

Evo-Rockets: Evolutionary Learning Pathfinding Algorithm C# Explored reinforcement learning and pathfinding by developing a 2D rocket stimulation in Unity.

 Programmed custom algorithm that evolves the path-to-target over many generations to improve precision.

SKILLS

Development Experience

Leading programming teams, following Agile development principles, and public speaking.

Java 23 Projects

Dynamic/recursive algorithms, complex data structures, and object-oriented design.

Python 15 Projects Building predictive models and neural networks for classifying large datasets.

Industry Tools

PyTorch, Keras, MySQL, Unity, MongoDB, Figma, Scikit-Learn, NumPy, Pandas, and Github.

B LANGUAGES

Programming

Java Python C# HTML & CSS

Conventional

English Hebrew ••••

LEADERSHIP

May 2019 -Dec 2020

Alpha Epsilon Pi Fraternity Executive Board

Entrusted by 100-member chapter to serve on executive board, lead new members, and plan events.

- Managed committee that transitioned 37 new members into the fraternity over two-semester period.
- Streamlined new member program framework for successors to use in creating their own schedules.

Aug 2018 -Aug 2019

StandWithUs Emerson Fellowship UCF Fellow

Organized 8 campus-wide events to help UCF students learn about Israel's culture and history.

- Collaborated with 6 other clubs, coordinating interorganizational events.
- Communicated successfully with over 1,500 students from a variety of backgrounds and majors.

Jan 2016 -May 2017

Drone Club Founder, Project Manager, Drone Engineer

· Founded Drone Club to further explore my interest in programming and building quadcopters.

• Built multiple quadcopters such as FPV racing drones and camera drones.