aneangel@ucsc.edu | Github | Linkedin | Portfolio

Anthony E. Angeles Creative Full-stack developer with interests in Al/ML.

Experience

VR Lab Research | UC - Santa Cruz.

Nov 2022 - Present

The SET Lab at UCSC is to design, implement and study human computer interaction technologies that enhance physical, social, and emotional experiences.

- Developed Python script to obtain static images from a specific latitude and longitude using Google Maps Platform API.
- Developed Python script which enabled us to stitch images obtained into an equirectangular format for VR development
- Build a complete Python script to use YoloV8 AI to segment and mask flammable objects within the images in VR.

Frontend/Software Developer | Nvidia Inc.

Jun 2022 - Sept 2022

Nvidia focuses on software and designing GPUS, APIs for data science and high-performance computing, AI hard- and software.

- Built a KPI chart displaying GPU Board data such as APY, FPY, and Goal Yield deployed team wide.
- Built an entire comment section for team-to-team handoff in between build phases of the RTX Boards.
- Handled various bugs assigned to me and built their solutions on top of production level code.

Product Development Engineer | Nvidia Inc.

Jun 2021 - Aug 2021

Nvidia focuses on software and designing GPUS, APIs for data science and high-performance computing, AI hard- and software.

- Consolidated GPU bugs over my 12-week period and used an internal tool to log RTX board data
- Built a Splunk native data log where users can specifically filter certain parameters to view FA Data and download them in either xml or raw JSON formats, deployed team wide.
- Worked on debugging RTX Boards, specifically the 30 series ampere boards.

Education

University of California, Santa Cruz | Santa Cruz, CA

Expected Graduation - December 2024

B.S - Computer Science and Design

Coursework: Data Structures and Algorithms, Computer Systems & C Programming, Discrete Mathematics, Programming Abstractions, Robot Automation, Vector Calculus, Operating Systems, Intro. to ML

Publications

- Samir Ghosh, Yanglan Wang, Kecheng Chen, **Anthony Angeles**, Andrew Moskovich, Kenichi Soga, and Katherine Isbister. 2023. <u>Designing a mixed-initiative multi-user VR interface for wildfire mitigation</u>. In HCI for Climate Change Imagining Sustainable Futures Workshop at the 2023 Conference on Human Factors in Computing Systems, (CHI \'23), Hamburg, Germany [pdf] (2023)

Notable Projects

Translate Bot | Python 2023 April

This utility translates entire text files into any given language requested by the user.

- Built a utility for cSINO Education Dept. at UCSC to take in .txt files obtained through Google Slides and pass them through using the DeepL Rest API
- supports multiple languages.
- reduces workload by 75 percent.

Scry.py | Python 2022.Dec - 2023.Jan

Scry.py is a static image script that allows a user to obtain the images of a location and stitch them in to one.

- Developed a method for a user to input parameters and have it iterate through 0-360 degrees of that specific location and stitch them together into one equirectangular JPG.
- Used Google Cloud and Google Maps platform.

Object Detection and Segmentation, YoloV8 | Python

2023.Jan - 2023.Jan

This python script detects flammable objects and masks them for use in a multi-user interface

- Built Python script on top of YoloV8 to mask and segment objects that are considered flammable in the environment.

Live Data | React.JS 2023 April

This utility was built for SET Lab which will later be incorporated into a professional use case VR multi user application.

- Built a utility for the VR Lab to display live data in VR (Oculus Quest Pro 2) allowing it to update every second to have the most concurrent data available to view. Technologies used: React.Js, Meta Hardware

Skills Summary

Languages: Python, JavaScript, React.JS, Node.JS, C/C++, HTML5, CSS, PHP

Key Skills: Git, AWS, SAP, MySQL,VR, REST APIs, Web Development, AI, CUDA, PyTorch, Splunk, Google Cloud, Jupyter Notebook, Matplotlib, Numpy, Postman, Confluence, Sharepoint,