# Nabhan Sazzad

Southern California

https://www.linkedin.com/in/nabhansazzad/ GitHub: https://github.com/nabhan02

### EXPERIENCE

Apple Cupertino, Ca

Software Engineer

June 2023 - September 2023

Conduct Computer Vision Research, exploring different algorithmic and machine learning techniques to determine whether or not they can be applied to products. Explicitly leveraging Computational Photography methods.

Ask research-oriented questions to assist in finding new ideas and discovering a research path.

Assist in collecting relevant data to train machine learning models - including models that are most popular at the time.

Record relevant metrics and visual data to present to leadership.

### General Atomics Aeronautical Systems

Poway, Ca

 $Software\ Engineer$ 

 $June\ 2022$  -  $August\ 2022$ ,  $January\ 2023$  -  $June\ 2023$ 

Developed Image Recommender Systems and Computer Vision Algorithms to automatically test uncommon objects.

Curate training data of major ASCII characters to train and improve object detection models.

Developed Automated Test Scripts to test over 100 requirements on an industry-leading unmanned drone.

Developed scripts to assist team members in producing more quickly. Script was adopted by other team members.

Completed a bonus problem with a Computer Vision based script to win a weekly competition.

Skills: Python, SVN Version Control

Amazon Sunnyvale, Ca

Software Development Engineer Intern

September 2022 - December 2022

Designed and Developed a serverless cloud API service from scratch to improve on an existing service.

Increased performance by implementing a simplified design that can be more easily updated and better managed.

Integrated many different services and packages to create sophisticated and scalable service.

Leveraged common Software Engineering Design Patterns like dependency injection to improve code quality.

Created multiple documents to document project milestones and present the benefits from the solution developed.

Participated in code review process to follow best code practices and produce consistently quality solutions.

Applied complex ideas like rate limiting to improve performance and create an overall more efficient service.

Skills: Typescript, Java, AWS, Bash, Linux, Git, Jira

Cyan Systems Goleta, Ca

Software Engineer Intern

Jan 2022 - June 2022

Developed a Full Stack Computer Vision Application for image handling and processing for a Linux OS.

Incorporated Networking techniques like TCP protocols for cross application communication.

Implemented Computer Vision and Machine Learning Algorithms for image recognition and detection.

Raised value of software product by more than 5%.

Skills: C++, Git, OpenCV, TensorFlow, Figma, Linux, Docker

## Center of Visual Computing at University of California San Diego

La Jolla, Ca

Undergraduate Researcher: Research Presentation

September 2021 - June 2022

Participated in a Computer Graphics Research Study under Professors Ravi Ramamoorthi and Tzu-Mao Li

Developed a script to automate the process of modifying and analyzing research experiments.

Discovered special conditions in which regularization techniques succeed and fail in Inverse Rendering

Implemented regularization techniques in an open source format such further research can be conducted

Acted as a group leader to help organize team tasks and ensure that the project is completed within the timeline

Investigated and concluded upon 8 different Variables related to Geometry in Inverse Rendering.

Skills: Python, Pytorch, CuPy, Cuda, GitHub, Linux

#### SKILLS

Python, C++/C, Java, AWS, JIRA, TensorFlow, Pytorch, OpenCV, Typescript, Javascript, (No)SQL, Flask, Bash

### **EDUCATION**

### University of California San Diego

La Jolla, California