Chandra Suresh

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EDUCATION

University of California, Los Angeles, B.S. Computer Engineering | Expected graduation of June 2023

3.90 GPA | Member of Electrical and Computer Engineering Dept.'s Fast Track honors program (top 7% dept. freshmen)

EXPERIENCE

Software Developer Intern — LA Blueprint

November 2020 - Present

- Developing React web application for Farm2People, a 501(c)(3) nonprofit aiming to create a direct supply chain between farmers and clients – targeting underserved communities and food insecurity programs
- Frontend and backend implementation of login/signup pages and user authentication pipeline for different classes of users, with a tech-stack of React.js, Airtable, and Airlock.

Software Developer — Visual Machines Group, UCLA

June 2020 - Present

- Wrote a Python program that tracks a subject's heart rate through video input, by analyzing the subtle rhythmic motions of the head
- Wrote textbook exercises and Python solutions for ECE 239AS: Computational Imaging (a graduate computer vision course), regarding surface reconstruction through photometric stereo, and hyperspectral image reconstruction through Gauss-Newton nonlinear optimization, etc.

PROJECTS

Kumbayuni Repository Project - *Language: Python, SQL, HTML*

July 2020 - Present

- Built a webapp that serves as a consolidated database for online lecture recordings from various courses and institutions, using Flask for backend, a SQLite database, and HTML for frontend
- Built a highly accurate automated anonymizer (optimized for Zoom recordings), written in Python, that censors faces and other identifying information present in the recordings
- https://kumbayuni.herokuapp.com/

Goober Eats: GPS Optimizer - *Language: C++*

January 2020

- Tool that optimizes deliveries to various locations Los Angeles from a central depot, and outputs optimal step by step street directions from the different locations along route; uses custom hashmap implementation
- Used algorithms in C++ including simulated annealing to find the best path, and programmed in Linux environment

Low Poly Compression - *Language: Python*

March 2020 - April 2020

- Wrote Python script incorporating OpenCV libraries that converts images and videos into poly art
- Implemented preprocessing of image (or frame), edge detection algorithm, optimized node locations for polygon vertices, then ran Delaunay Triangulation algorithm to generate triangles across the image

SKILLS

Python, C++, Java, SQL, Bash

Computer Vision

Git, Flask, Linux, React.js

AWARDS

Innovation in Control Award
Won in FRC (a national robotics competition) for our robot's superior vision capabilities

UCLA Dean's List Award

Awarded all quarters, for holding a 3.75+ GPA

RELEVANT COURSEWORK

CS 111: Operating System Principles

CS 35L: Software Construction Laboratory

EE 102: Signals and Systems

CS 33: Computer Organization

CS 32: Data Structures and Algorithm (C++)

CS M51A: Logic Design/Digital Systems

OTHER CLUBS/ACTIVITIES

UCLA ACM Hack: Officer