Shrey Prakash Sahgal

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EDUCATION

University of Michigan   Ann Arbor, MI
B.S.E. in Computer Science   *Class of 2024*
Dean's Honors List, Fall 2020

Relevant Coursework: Data Structures and Algorithms, Discrete Math, Programming and Data Structures, Calculus, Physics, Chemistry, Astrophysics

Horace Mann School   Bronx, NY
High School Diploma   *Class of 2020*

EXPERIENCE

Coopsight LLC   Ann Arbor, MI
Software Developer   *January 2021-Present*
- Deployed scalable, RESTful APIs via Docker onto a highly available Kubernetes cluster.
- Implemented models to extract keywords and discover synergies to help venture capitalists evaluate their portfolios and dealflows.

U-M Space Physics Research Lab   Ann Arbor, MI
Research Intern   *December 2020-Present*
- Helped design a faster-than-realtime data processing pipeline for NASA's Sun Radio Interferometer Space Experiment (SunRISE), a recently-funded NASA Heliophysics Mission of Opportunity that will launch 6 satellites into GEO orbit in 2023 to create the first synthetic aperture in space.

Essen Medical Healthcare   Bronx, NY
SWE/Data Science Intern   *March 2020 – September 2020*
- Developed a REST API using Flask and PostgreSQL to store and manage patient and healthcare worker data to optimize patient care.
- Explored ways to visualize care management productivity and analyze patient data.

Quio Biotechnologies   New York, NY
SWE Intern   *May 2019 – October 2019*
- Used Flask, PostgreSQL, Health and Human Services API, Twilio API, and Google Cloud Storage to create a centralized, categorized database of healthcare articles.

PROJECTS

Michigan Robotic Submarine | *Python, ROS*   *September 2020-Present*
- Work with other engineers to develop autonomous control and navigation software for an underwater vehicle
- Helped architect a system design integrating computer vision, task planning, and motor control using ROS.

DancingOrFalling | *Python, Flask, React, Firestore*   *2020 – September 2020*
- Built a semi-popular fullstack web game with over a thousand unique users where players have limited time to determine whether a freeze-frame image is of someone falling or break-dancing.
- Designed an algorithm which scrapes reddit for freeze-frame images of people either dancing or falling using scikit-video.

Garf! | *Flask, OpenCV, jQuery*   *March 2020 – May 2020*
- Created a website which generates random Garfield comics by splicing and re-arranging frames from old comics.
- Deployed a RESTful API which splits images of comics into panels using OpenCV.

TECHNICAL SKILLS

Software: Python (+Flask/FastAPI), C/C++, Java (+Android), SQL (Postgres), JavaScript (+React/Node.js), HTML/CSS, LaTeX
Developer Tools: Git, Emacs, VS/VSCode, Google Cloud Platform
Math: Matrix Algebra, Discrete Math, Calculus
Hardware: Autodesk Inventor, OpenSCAD, Fusion 360, Shop Tools (saws, sanders, routers, mills)