Sidharth Baskaran

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Education

Georgia Institute of Technology *Atlanta, GA* August 2022 – May 2026 (expected)

Pursuing B.S. in Computer Science

- Coursework: Linear Algebra (Fall), Introduction to Object-Oriented Programming (Fall)

Liberal Arts and Science Academy High School *Austin, TX* August 2018 – May 2022

High School Diploma

- Coursework: Physics C: Mechanics, Physics C: Electricity & Magnetism, Physics 1, Physics 2, Statistics, Calculus BC, Computer Science A

Experience

Research Intern - UT Austin Aerospace Engineering Department | Repository June 2021 – August 2021

- Supervised by Prof. Maruthi Akella, Aerospace Engineering and Engineering Mechanics Department.
- Solved transcendental equations describing spacecraft flight.
- Used complex interpolation methods and Python libraries (SciPy, NumPy) and GNU Octave.

Independent Research - Visual Informatics Group at UT Austin July 2021 – Present

- Guided by Dr. Zhangyang (Atlas) Wang in the Electrical & Computer Engineering Department.
- Train and modify PyTorch deep neural networks on the Deep Plastic Surgery project for use on the Monster Project dataset and preprocess data with image processing routines.
- Wrote Python web crawler to aggregate artist renderings of childrens' monster drawings from website

Extracurriculars

Science Olympiad (Focus: Engineering) September 2016 – June 2022 (Team Captain June 2020 – June 2022)

- A national-level competition in which students prepare and compete in various science-based events
- Team captain specializing in engineering events

Projects

Bookstore App | React & TypeScript | GitHub June 2022 – Present

- Web app to centralize Chinmaya Mission Austin's temple bookstore operations

Leetcode Progress Tracker | Python | GitHub July 2022

- CLI script to track LeetCode user progress through use of client requests, Google APIs, and automated web actions

Machine Learning Independent Study April 2021 – February 2022

- Completed Coursera Machine Learning course and courses from Deep Learning Specialization, along with self-study of Stanford's CS229 and CS231n courses in order to gain sound theoretical understanding of ML and applications
- Used TensorFlow Keras and iPython Notebooks hosted in Google Colab to recognize handwritten digits

Team Tryout Manager | Google Apps Script | GitHub June 2021

- Google Apps Script project integrating with spreadsheets to automate the scheduling and distribution of over 20 team tryouts exams during the competitive season, minimizing human input and error

Gravity Vehicle | Engineering | Portfolio August 2021 – May 2022

- A vehicle that uses gravitational potential energy to reach a target point as accurately as possible.
- Used Fusion360 and 3D printing to achieve consistent road performance and implement a novel rigid-axle suspension system
- Leveraged mathematical interpolation of test run data to minimize real-world error factor

Technical Skills

Languages: Python (Proficient), JavaScript (Proficient), Java (Familiar), C++ (Familiar), HTML/CSS (Familiar)
Tools/Skills: Git, LaTeX , Jupyter Notebooks, ReactJS, Web Scraping, 3D printing and CAD design