Subhash C. Kantamneni

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Education

Massachusetts Institute of Technology (MIT) 2020 – 2024

Candidate for SB in Physics, Computer Science and Electrical Engineering; GPA: 5.0/5.0 Cambridge, MA

- **Activities & Societies:** MIT Consulting Group, Leadership Training Institute, Sloan Business Club
- **Courses:** 6.031 Software Design, 6.006 Algorithms, 6.08 Embedded Systems, 8.04/8.05 Quantum Physics I/II

Suncoast Community High School 2016 – 2020

Math, Science, and Engineering Program; GPA: 4.0/4.0 Riviera Beach, Florida

- **Achievements:** Valedictorian, National Merit Finalist, National AP Scholar, Kovner Scholar ($40,000)

Experience

NASA Jet Propulsion Laboratory Jun – Aug 2021

Exoplanet Discovery Group Intern Pasadena, CA

- Automated verification and validation for the EXCALIBUR exoplanet atmospheric analysis pipeline using ML
- Explored classical machine learning and advanced data simulation techniques while writing production level code
- Deployed code as a permanent addition to the EXCALIBUR pipeline with results to be published

MIT Center for Brains, Minds, and Machines Oct 2020 – Jan 2021

ARC Solving Group Member Cambridge, MA

- Created new Python primitives to achieve 20 of the group's 100 cumulative solves on ARC (the 'IQ test' for AIs)
- Ran cluster jobs frequently and was directly involved with the overall direction of the AI model

MIT Kavli Institute for Astrophysics Jun – Aug 2019

Research Science Institute Scholar Cambridge, MA

- Recalculated theoretical stellar isochrones using Non-Local Thermodynamic Equilibrium (NLTE) conditions
- Worked at MIT's Kavli Institute for Astrophysics and was recognized as a top 10 oral presenter

Selected Projects

- **Visualization Tool for MIT Classes (Data Viz., Web Scraping)** Created an interactive online tool for users to visualize the dependencies of MIT classes using data scraped from MIT's course catalog. *Tech: Python (Plotly, iGraph, Beautiful Soup).* Website Link.
- **Beating NBA Spreads with Machine Learning (Model Development, Feature Engineering)** Trained a LightGBM model to 70% accuracy on scraped NBA data and devised a highly profitable betting strategy based on model certainty. *Tech: LightGBM, Random Forests, Python (Scikit-Learn, Pandas, MatPlotLib, Beautiful Soup).* Github Link.

Leadership & Extracurriculars

Global Teaching Labs - Korea Jan 2022

Teacher Seoul, South Korea

- Taught in Seoul to disadvantaged middle school students with limited English ability to inspire their interests in STEM
- Codeveloped Arduino projects to introduce programming and ideated engineering projects to illustrate physics concepts

Leadership Training Institute Sep 2020 – Present

Leadership Mentor Cambridge, MA

- Mentored a group of 15 Boston public school students for 3 months in leadership and public speaking
- Designed weekly leadership exercises that kept students engaged while improving their communicative abilities

MIT Consulting Group Sep 2021 – Present

Consultant Cambridge, MA

- Conducted market research and developed branding strategies to bolster a $1B gaming company's app performance

Technical Skills

Typescript	Well-trained in creating clean, maintainable code and industry style automated unit testing
Python	Utilized extensively for research projects, specifically the Matplotlib, Scikit-Learn, and NumPy libraries
C	Created Arduino projects including a self-driving vehicle and a web integrated light-sound alarm clock
Other	Experienced with Linux, command-line Git, LaTeX, Bash scripting, and submitting batch jobs