Akshaya Naapa Ramesh

Littleton, MA 01460

akshayan@umich.edu, (978) 501-4570

EDUCATION

University of Michigan, Ann Arbor, MI — April 2026

Bachelor of Science in Engineering in Computer Engineering; GPA: 3.86/4.00

Activities: Michigan Mars Rover Team, Girls in EECS, Arts Chorale

Relevant Courses:

- Discrete Mathematics, Logic Design, Data Structures and Algorithms

Honors: Dean's List - Fall 2022, Winter 2023

Littleton High School, Littleton, MA — June 2022

Diploma; GPA: 5.02/5.00

Honors: NCWIT Aspirations In Computing National Honorable Mention - February 2022, Harvard Book Award - September 2021

PROJECT EXPERIENCE

Michigan Mars Rover Team, University of Michigan, Ann Arbor, MI

Embedded Hardware Team Member — Sept. 2022.-Present

- Drafted requirements and designed 24v-converter printed circuit board on Altium software to help with power distribution of the Mars Rover.
- Worked on schematic design and layout of a CAN transceiver to aid CAN communication protocol.

Pre-College Research Institute, Harvard University, Cambridge, MA

Social Sciences Student & Researcher — Jun.-Aug. 2021

- Learned about different fields and techniques in Social Science research.
- Proposed research project: Analyzing Twitter Ethnographies on Viewpoints on World Hunger.

MIT Beaver Works Summer Institute, MIT Lincoln Laboratory, Lexington, MA

Medlytics Student & Researcher — Jan.-Aug. 2020

- Learned machine learning techniques and its applications in health data.
- Built lung cancer classifying application with 98% accuracy in flask framework using custom built machine learning model for final project in the program.

EXPERIENCE

Admin and Tutor, Silverline Tutoring | https://silverlinetutoring.org/ — Feb. 2021-Apr. 2022

- Helped run free tutoring service for 1,114 students globally on a Discord server and tutored students in High School level Math, Physics, and Biology.

PROJECTS | Github: https://github.com/akshayanr, https://github.com/anaaparamesh

Lung Cancer Classifier (Medlytics Research Project) | Python, Pandas, Scikit-learn, Keras, CSS, HTML

- Developed machine learning classifier using VGG-19 transfer learning model and 15000 histopathological images of healthy and cancerous lung tissue from Kaggle.
- Data augmented histopathological images using ImageDataGenerator for training classifier.

4-Function Calculator | Verilog

- Built an RTL sequential calculator in Verilog that could perform addition, subtraction, multiplication, and division.
- Implemented ripple carry adder and Booth's multiplication algorithm with error checking.
- Performed extensive testing by creating edge case test benches and simulating design in ModelSim.

SKILLS

- **Languages:** C++, Verilog, Python, Java, HTML
- **Applications**: Git, Jupyter Notebook, Altium, ModelSim, Quartus Prime
- **Certifications:** BWSI Python Core 2020, Version Control: Git 2020 (MIT edX); Android Basics (Udacity)