Manith Luthria

https://mluth10.github.io/portfolio_website

Email : mluth10@gmail.com
Mobile : +1-713-859-5238

Education

- **Duke University, Graduate**　　　　　　　　　　　　　　　　　　　　Durham, NC
  MEng in Electrical and Computer Engineering　　　　　　　　　*August 2022 – May 2024*
- **Duke University, Undergraduate**　　　　　　　　　　　　　　　　　　Durham, NC
  BSE in Electrical and Computer Engineering, BSE in Computer Science; GPA: 3.78/4.00　　*August 2019 – May 2023*
  - **Relevant Coursework** : Computer Architecture, Data Science, Signals and Systems, Software Design, Data Structures and Algorithms, Robotics, Microelectronics, Circuitry, Network Architecture, Operating Systems, Linear Algebra

Experience

- **Texas Instruments**　　　　　　　　　　　　　　　　　　　　　　　Dallas, TX
  Software Engineering Intern　　　　　　　　　　　　　　　　*May 2023 - Aug 2023*
  - Added copy-paste functionality to tool PM maintenance website, saved technicians hours of repetitive work per day
  - Reformatted additions to database, prevented inevitable overflows
  - Created multiple 'report' pages on multiple internal sites, streamlined fab performance analysis
  - Used: React, JavaScript, SQL (Oracle DB), Java (Spring)
- **General Motors**　　　　　　　　　　　　　　　　　　　　　　　Detroit, MI
  Calibration Engineering Intern　　　　　　　　　　　　　　*June 2022 - Aug 2022*
  - Created Python tool to automate engine OBD trouble code analysis, cut analysis time by 50%
  - Performed in-vehicle engine system testing using INCA
  - Learned fundamentals of Engine Control and Calibration
  - Used: Python, C, INCA
- **Duke ECE Department, Computer Architecture Class**　　　　　　　Durham, NC
  Teaching Assistant　　　　　　　　　　　　　　　　　　*January 2021 - present*
  - Taught principles of Von Neumann compuer architecture, C programming, RISC-V/MIPS assembly language, boolean logic, etc.
  - Led weekly office hours and discussion
  - Effectively communicated complex topics to students
  - Used: C, Logisim, RISC-V, MIPS

Projects

- **TypeRacer (Class)**　　　　　　　　　　　　　　　　　　April 2022 - May 2022
  - Built pipelined five-stage processor from scrath using Verilog, on which game code was run
  - Wrote assembly code and extended processor to run typing speed game on a Xilinx FPGA
  - Used: Verilog, RISC-V, Vivado

- **Deep Sea AUV (Class)**　　　　　　　　　　　September 2022 - Novemember 2022
  - Helped construct deep sea robot for research purposes
  - Waterproofed body to withstand pressures at 3000 m depth
  - Used: CAD, C, Microcontrollers, Circuit Design

- **Twitter NBA Bot (Independent)**　　　　　　October 2022 - November 2022
  - Wrote code to scrape live NBA game data from espn.com in order to determine game "watchability" score
  - Used Twitter API to post tweets when a game reached a certain threshold of watchability
  - Used: Python (Tweepy, BeautifulSoup), HTTP, Pandas

Technical Skills and Additional Info

- **Languages**: Java, Python, JS, C, HTML/CSS, Verilog, RISC, Spanish, Hindi
- **Tools/Skills**: Git, React, Linux, Flask, SQL, Arduino, MATLAB, INCA, Vivado, Calibration, Controls
- **Interests**: Squash, Cooking, Bicycling, Lifting, Basketball
- **Achievements**: Winner, Wolfram Prize @ HackDuke 2020