

Siddhartha Bhattacharya

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EDUCATION

Michigan State University

Aug 2021 – Present

B.S.E. Computer Science; Mathematics Minor; GPA 3.65

EXPERIENCE

Software Engineer Intern – ZF Friedrichshafen

May 2023 – Aug 2023

- Test Algorithm Optimization
 - Redesigned testing algorithm to fully automate embedded software test cases, resulting in 90% reduction in test execution time.
 - Designed and implemented a testing automation framework using Embedded C and Python to streamline black box testing procedures.
 - Wrote test cases for core software of front camera modules built on Infineon Aurix microcontrollers
- Integration and Development Efficiency
 - Designed and implemented scripts to facilitate communication between front-facing cameras, Lauterbach debuggers, power supplies, and connected systems

Undergraduate Learning Assistant (TA)

Jan 2023 – Present

- ULA for MSU's CSE 231: Introduction to Programming (Python).
 - Responsible for managing and delivering content to 50+ students in a lab section, assisting students during help room hours, and grading.

PROJECT

Move Master:

- Collaborated in a group of three peers to develop an exercise form-checking program aimed at improving user technique. Leveraged machine learning techniques with TensorFlow BlazePose to accurately analyze and correct exercise form in real-time

Stock Monitoring Discord Bot

- Developed a Discord bot using the discord.py API, pandas, and REST APIs like IEX Cloud and Polygon to provide stock monitoring functions such as watchlists, live quotes, and fundamental analysis tools to over 2000 traders.

TECHNICAL SKILLS

Undergraduate Courses: Algorithm Engineering, Algorithms and Data Structures, Object Oriented Software Development, Computer Systems, Computer Organization and Architecture

Languages/Technologies: C++; C; Python; ARM Assembly; UNIX; Git; HTML; CSS