# Siddhartha Bhattacharya

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## **EDUCATION**

# **Michigan State University**

Aug 2021 - Present

B.S.E. Computer Science; Mathematics Minor; 3.7 GPA

#### **EXPERIENCE**

#### Software Engineer Intern – ZF Friedrichshafen

May 2023 - Oct 2023

- Embedded Software Test Automation
  - Designed and implemented a test automation framework to streamline black-box testing procedures for vehicle front-facing cameras.
  - Implemented automation framework with Embedded C and Python to communicate with Infineon Aurix Microcontrollers and Lauterbach debuggers.
  - Resulted in over 90% reduction in overall testing time from manual testing.
- Integration and Development Efficiency
  - Worked with integration team to write scripts to facilitate communication between front-facing cameras, Lauterbach debuggers, power supplies, and connected systems.

#### Teaching Assistant - Michigan State University

Jan 2023 - Present

- TA for MSU's CSE 231: Introduction to Programming (Python).
  - o Responsible for instructing weekly lab sections of 51 students in introductory Python.
  - o Organized and held office hours to provide individual help and feedback to students.

#### **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, Autonomous Vehicles, Linear Algebra, Object Oriented Software Development, Computer Networking

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