

# VETRI VIJAY

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## Objective

- Obtain experience in Software Engineering and related fields.

## Education

- **Michigan State University** | Junior B.S in Computer Science Engineering | 3.78 (Sep 2020 – Expected Dec 2023)
- **Troy High School** | High School Diploma | Class of 2020 (Sep 2016 – May 2020)

## Experiences

- **Teaching Assistant | Michigan State College of Engineering** (Jan 2022 – May 2022)
  - Taught CSE 232 in C++ alongside a team of instructors.
  - Responsibilities included:
    - Hosting lab sections for hands on development of C++ code and algorithms.
    - Providing office hours for guidance through assignments and answering conceptual questions, alongside maintaining instructor-student relations.
    - Managing attendance and grades for a class of ~370 students using course management tools.
    - Communicating with fellow instructors about common student concerns, pacing, assignment difficulty and trends, leading to collectively resolving any issues found.
- **Software Lead | MSU Solar Car Team** (Sep 2021 – Current)
  - Worked with the Driver Control System (DCS) team to update electrical boards and block diagrams.
  - Developed and managed software components for a solar car using Arduinos and CAN communications.
    - Updated DCS software with new I/O and functionality based on car and electrical board updates.
    - Created new software and startup sequence for the power distribution board's Arduino.
    - Utilized CAN to communicate between motor controllers, Arduinos, and infotainment systems.
- **Software Engineering Intern | DM3D Technologies, Auburn Hills, Michigan** (Jun 2020 – Aug 2020)
  - Collaborated with machine designers to develop software which cut down the time required to complete the following tasks involving Direct Metal Deposition (DMD) 3D printing:
    - Monitoring and displaying live data feeds from operating machinery.
    - Collecting data from post-production parts and generating reports.
    - Inspecting DMD printed parts through a visual application.
  - Produced thorough user manuals for the software developed.
  - Assisted in troubleshooting machine software and hardware errors.
  - Adhered to COVID-19 protocols in the workplace.
- **Assistant Lead | FIRST High School Robotics** (Sep 2017 – Mar 2020)
  - Worked with a team of students to build a robot to compete in games and spread STEM in the community.
  - Learned and implemented Java robot programming utilizing WPILib.
    - Mentored a middle school robotics team on design, fabrication, and programming for their robot.
  - Assisted in hosting FIRST robotics competitions events of ~1000 attendees as a student volunteer.

## Technical Skills

- C++
- Java
- Arduino
- CAN Bus
- Python

## Soft Skills

- Visual Basic
- Microsoft SQL
- LabView
- JavaScript
- MS Office Suite
- Leadership
- Communication
- Teamwork
- Teaching
- Time Management