

# SHIVIN RAJESH ANAND

shivin.r.anand@gmail.com | 813-767-6507 | linkedin.com/in/shivinranand/

## EDUCATION

### MIDDLETON HIGH SCHOOL

Tampa, FL

Engineering Magnet; **GPA: 3.9**

May 2026

**Relevant Coursework:** AP Calculus BC, AP Physics C Mechanics, AP Physics 1, Engineering Design and Development, Digital Electronics, Aerospace Engineering Fundamentals, Process of Engineering Design, Technical Design, Computer Integrated Manufacturing

### SKILLS

Robotic Kinematics, Web Design, Rapid prototyping, Electronics prototyping, Mechanical design, Business management

## EXPERIENCE & INVOLVEMENT

### USF

Tampa, FL

Head Researcher

May 2024 - Present

- Rapidly prototyped over **10 iterations** for a hydroponic plant growing apparatus in the span of 1 month
- Designed and tested a custom PCB integrating nitrogen, oxygen, and temperature sensors using a Teensy microcontroller, enabling real-time monitoring of plant health with **98%** data accuracy
- Implemented a multi-camera computer vision system tracking root, stem, and canopy growth, achieving fully autonomous environmental adaptation and **24/7** monitoring
- Integrated a dual-reservoir irrigation system maintaining continuous nutrient flow, reducing manual maintenance time by over **80%** and ensuring stable plant hydration

### Middleton High School Robotics

Tampa, FL

President

May 2024 – Present

- Revitalized the school's FIRST Robotics Challenge (FRC) program after years of inactivity, leading its return to competition and earning **2 national** awards and 1 award at the **World Championship**, marking the team's most successful season to date
- Managed and mentored **100+** students across FIRST and VEX divisions, increasing competition participation and member retention by **30%**
- Spearheaded mechanical design for Team #3846, developing two FTC robots ranked in the **top 5%** statewide for offensive power rating
- Organized and coordinated 9 teams to participate in **15+** regional competitions, expanding representation across 4 VEX, 4 FTC, and 1 FRC team
- Led **2** FIRST Tech Challenge teams (1369 and 26588) to state qualification, demonstrating technical and organizational leadership

### Florida Student Association of Mathematics

Tampa, FL

Region 4a Coordinator & Webmaster

June 2023 – Present

- Developed and maintained the organization's website using HTML, CSS, and JavaScript, migrating all student and competition resources to a fully web-based platform, increasing accessibility and reducing manual communication by **60%**
- Oversaw statewide communications, event scheduling, and competition logistics, streamlining outreach to **400+** students and advisors across Florida
- Served as Regional Coordinator for **80** students in the Tampa Bay area, creating and managing opportunities for participation in elite competitions such as HMMT, PUMaC, ARML, and CMIMC, boosting regional engagement by **50%**

## CERTIFICATIONS

### Engineering

- RECF Robotics
- RECF Programming
- RECF Electrical
- RECF Fundamentals of Engineering
- RECF Mechanical
- Autodesk Inventor Certified User
- Autodesk AutoCAD Certified User
- Autodesk Fusion 360 Certified User

### Software

- IT Specialist - Device Configuration and Management
- LE-1:Linux Essentials
- Microsoft Certified: Azure Fundamentals
- CompTIA IT Fundamentals+ (ITF+)
- IT Specialist - HTML and CSS

### Business

- PMI Project Management Ready
- Master Certification in Entrepreneurship
- ESB:Entrepreneurship and Small Business v.2
- Pearson Critical Career Skills Professional Communication