

# Aadarsh S U

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[LinkedIn](#) | [GitHub](#) | [Website](#)

## EXPERIENCE

### Microchip Technologies Inc.

On-Site

A publicly listed American Corporation that manufactures microcontroller, analog, and Flash-IP integrated circuits  
**Microchip – Engineer I - Corporate Applications Engineer** Jul 2024 – Mar 2025

- Worked with clients to deliver critical project tasks across the entire WNET product portfolio, consistently meeting deadlines.
- Developed a Python tool using OpenCV to extract pin names from customer-provided schematics, enabling **global team-wide usage**.
- Developed an alternative network testing GUI in Python for customized hardware testing, reducing testing time by **30%**.
- Performed functional and protocol testing of wired network products with integrated MPUs on **Linux** platforms, utilizing **Python-based scripts and libraries**.
- Developed a **GUI application** comprising 6 interactive screens, utilizing a structured toolchain to build and package the application into an executable. Ensured smooth deployment and functionality by validating the GUI through the generated executable.
- Validated and analyzed the implementation of IEEE protocols such as PTP and ACL on managed Ethernet switches.

### Student Intern

Chennai, India

### Microchip Technologies Inc

Jan 2024 - Jun 2024

- Developed an embedded C solution for data transmission over Ethernet on entry-level microcontrollers without native Ethernet support, achieving a **25%** increase in transmission speed.

### Workshop

Bangalore, India (Sep 2022)

- Gained hands-on experience with Android development tools and implemented real-time text-to-speech functionality conducted by **IISc Bangalore** to enhance practical knowledge in mobile app development.

## EDUCATION

### Thiagarajar College of Engineering

Madurai, India

Bachelors of Engineering in Electronics and Communication Engineering

Sep 2020 – May 2024

CGPA **9.61**

### Vidhya Sagar Global school

Chengalpattu, India

12<sup>th</sup> Grade

June 2019 - March 2020

Score **92%**

## PROJECTS

- **Email Automation Script:** Developed a Selenium WebDriver script with Python for email automation during a college club event, resulting in **sending over 500 email invites** to participants.
- **Car Showroom Management System:** Developed a showroom management system with full **CRUD** functionality, enabling staff to efficiently add, update, and remove vehicle records, streamlining inventory tracking and status management.
- **Hostel Management System:** Designed and developed a web-based application for student record management, implementing complete **CRUD** operations and integrating a relational database for optimized data storage and retrieval.
- **Smog Prediction and alerting system:** Executed **end-to-end integration** of a smog detection system using NodeMCU, environmental sensors, and custom PCB for interfacing. Enabled real-time and cloud-based monitoring with **ThingSpeak**, applying **data analytics and predictive modeling (LPC)** for trend analysis. Combined hardware design, **real-time data processing**, and IoT for smart environmental monitoring.
- **Hobby Projects:**
  - Designed and implemented game logic for Tic-Tac-Toe and Black Jack using **Python**.
  - Implemented web scraping projects using Python, leveraging libraries like Requests, BeautifulSoup, and CSV for data extraction and organization.

## SKILLS

- **Languages:** Python, PHP, JavaScript, C
- **Databases:** SQL
- **Version Control:** Git
- **Web Technologies:** HTML, CSS.

## CERTIFICATIONS

- Elite certification for “The Joy of Computing using Python” awarded by IIT-Madras
- The Complete Python Bootcamp from Zero to hero in Python - Udemy
- The complete 2024 Web Development Bootcamp - Udemy.