

EDUCATION

Sona College of Technology  
 Electronics and Communication Engineering; CGPA: 8.1
 Salem, India  
**September 2021 – May 2025**

SKILLS SUMMARY

- **Languages:** C, JAVA, Python, SQL, Linux
- **Frameworks:** Arduino Framework, YOLOv8, TensorFlow, Scikit-Learn, Streamlit
- **Tools:** Arduino IDE, ESP-32, Excel, PowerPoint, Tinkercad, Git, Burp Suite
- **Platforms:** ThinkSpeak, Jupyter Notebook, Visual Studio Code, AWS
- **Protocols:** TCP/IP, MQTT, HTTPS, UART, SPI, I2C, BLE, CAN, DNS, FTP, SSH
- **Soft Skills:** Leadership, Team Collaboration, Quick Learner, Effective communication

WORK EXPERIENCE

**WEB DEVELOPMENT & NETWORKING INTERN** February 2025 - May 2025

- Gained hands-on experience with domain registration, DNS configuration, and server-side hosting processes.
- Explored the fundamentals of web protocols like HTTP, HTTPS, FTP, and SSL certificate setup during website deployment.
- Learned about IP mapping, HTTPS setup, and server behavior while deploying live websites.
- Understood the importance of secure networking and uptime monitoring in hosting environments, connecting concepts with Cybersecurity basics.
- Contributed to live site configuration and maintenance (<https://arunaudit.com>) as part of the deployment team.

PROJECTS

**Seizure Detection and Alert System using GSR Sensor | SIH'23** October 2023 – December 2023

- Designed a wearable health system to capture GSR data for seizure and stress detection.
- Integrated with Arduino and Blynk for cloud-based monitoring and alert generation.
- Enabled real-time mobile alerts on stress spikes, improving responsiveness by 80%.
- Validated across multiple test cases with an 80%+ success rate in identifying anomalies.

**IV Pole Monitoring System with Vital Detection |** April 2024 – September 2024

- Built an ESP32-based smart IV pole with temperature and pulse oximeter integration.
- Enabled wireless transmission to ThingSpeak for remote patient monitoring.
- Reduced manual vital checks by 40% during clinical simulations. Thereby we have achieved and maintained 90% alert accuracy.

**Smart Agriculture System with Cloud Connectivity |** October 2024 - January 2025

- Created a field-deployable IoT setup to monitor soil moisture, temperature, and humidity.
- Increased irrigation and detection efficiency by 35% using Blynk automation rules.
- Automated irrigation decisions were made based on sensor threshold logic. Delivered consistent data transmission and timely water delivery in all runs.

**Coffee Leaf Disease Detection using YOLOv8 and Streamlit | Final Year Project** January 2025 – April 2025

- Built a real-time image-based detection system using YOLOv8 with ~90% accuracy on test data. Trained on annotated datasets featuring common diseases such as Coffee Rust, Leaf Miner, and Cercospora.
- Displayed top-3 predictions with confidence scores and Grad-CAM overlays for explainability.
- Evaluated model performance using a confusion matrix (Precision: 91%, Recall: 90%, F1-Score: 90.5%) to ensure classification quality.

CERTIFICATES

**Internet Of Things (NPTEL) | CERTIFICATE** April 2023

- Completed online certification focusing on IoT fundamentals, sensors, communication, and real-time applications.

**Ethical Hacking (NPTEL) | CERTIFICATE** October 2023

- Gained understanding of common threats, vulnerabilities, and penetration testing approaches in networks and systems.

**Cloud Computing (NPTEL) | CERTIFICATE** August 2024

- Learned cloud architecture, deployment models, and services such as SaaS, PaaS, and IaaS with hands-on demos.

**Complete Guide to Build IoT Things (Udemy) | CERTIFICATE** October 2024

- Practical course on building IoT systems using Arduino, ESP32, and integrating with cloud dashboards.

**AIG Shields Up: Cybersecurity Job Simulation Certificate (Forage) | CERTIFICATE** January 2025

- Understood enterprise cybersecurity frameworks and participated in threat modelling and policy creation scenarios.

**Google Cybersecurity Professional Certificate (Google) | CERTIFICATE**

- Completed a comprehensive certification covering cybersecurity tools, frameworks, risk assessment, and hands-on lab simulations.