

# AMUDAN R T

+91 9842805545 [amudan.in](mailto:amudan.in) [amudanthangavel@gmail.com](mailto:amudanthangavel@gmail.com) [amudanthangavel](https://www.linkedin.com/in/amudanthangavel) [AmudanThangavel](https://www.youtube.com/channel/UCv33333333333333333333)

## Experience

### Palo Alto Networks

June 2023 – present

Software Engineer Intern

Onsite

- Developed a full-stack application to monitor on-prem ESXi servers, enabling engineers to reserve servers and managers to view server utilization.
- Engaged in the configuration and enhancement of a **cloud-based security service** (**Prisma Access** a SASE product), to simulate the real time customer scenario with all the major features of the Firewall.
- Specialized in handling features such as **DLP** (Data Loss Prevention), **Domain Fronting**, **DNS Proxy**, **RBI**, **IPSec tunneling**
- Tech stack: **NEXTJS, Django, Rest-framework API, MySQL, Docker, Nginx, Linux, Automation(python), Pytest, Networking**

### IIT Bombay (eYantra)

June 2022 – August 2022

Full Stack Developer Intern

Hybrid

- Led the design, development, and implementation of the graphic and user interface for a Full stack application which is a **gamified platform to learn python**.
- This enabled IIT Bombay to teach **thousands of students** Python using their mobile devices and laptops at home.
- Tech stack **Django, React, MySQL, Python, Brython, Figma, and JavaScript**.

## Technical Skills

**Languages:** Python, JavaScript, Typescript, Bash. **Web Development and Frameworks:** React, NextJS, TailwindCSS, HTML, CSS, Bootstrap, Django, Fast API, Flask, MySQL, MongoDB. **Networking and Protocols:** TCP/IP, OSI Model, Networking, VPN. **DevOps and Infrastructure Tools:** Docker, VMWare ESXi, Nginx, Linux (RedHat), Git, AWS, GCP. **Testing and Developer Tools:** Pytest, Postman.

## Projects

### Sentinel Drone ( Hardware project )

[YouTube](#)

- Developed a real time drone to fly with the help of ROS and image processing. Won 1st prize with **Rs.50,000** in the international competition by **IIT Bombay**
- Tech stack:** Python, Robotic Operating System (ROS), Numpy, openCV, Gazebo, Linux, QGIS, Single board computer(Raspberry pi zero)

### Python Combat (real-time project )

[GitHub](#)

- Developed a web platform for beginner coders to learn Python through gamified lessons. Utilized by IIT Bombay to teach Python to high school students. This saved a huge time and optimized their teaching program.
- Tech stack:** Django, Python, HTML, CSS, JavaScript, TypeScript, React, Git, Brython, NGiNX

### Strawberry Stacker ( simulation project )

[YouTube](#)

- Designed an autonomous drone for strawberry pick-and-drop using image processing and advanced algorithms. Placed 5th out of 2000 teams in an international competition
- Tech stack:** Python, Robotic Operating System (ROS), Numpy, openCV, Gazebo, Linux, RViz

### Freelancing Projects ( Business clients )

- Landing pages with optimized SEO and UI/UX - [kitefurn.com](#), [onebee.in](#), [thebodaciousbosses.com](#)
- E-commerce website for a IoT company
- Tech stack:** Django, NextJS, AWS, Docker, Stripe integration, Redis, NGiNX

## Education

### KPR Institute of Engineering and Technology, Coimbatore

2020 - 2024

B.E in Electronics & Communication Engineering

8.6/10 CGPA

## Patent Published

### Ornithopter

Utility patent

- Using Biomimetics, a robotic 3D printed predatory bird can be used to regulate crop-eating birds, frightening them away which attracting the other predatory birds to the area

## Competitions/Achievements

- IIT - Bombay (**eYantra 2022-2023 International Robotic Competition**) - 1st prize.
- IIT - Bombay (**eYantra 2021-2022 International Robotic Competition**) - 5th prize.
- NIT - Trichy (**Prayan - 2023 Quadcombat**) - 2nd prize.
- VIT - Chennai (**Techno - 2022 - Drone Racing**) - 2nd prize.
- NIT - Trichy (**Aaruus - 2022 - Quadcopter Challenge**) - 3rd prize.
- SAINTGITS College of Engineering & Technology (**Shrishti 2023 - National Level Project Presentation**) - 1st prize.
- Sathyabama Technology Business Incubator (**Contest 2022 - National Level Project Presentation**) - 1st prize.
- KPR Institute of Engineering and Technology (**Innovsense 23 - National Level Project Presentation**) - 1st prize.

## DSA & Courses

- Leetcode - **200+ problems**
- Hacker Rank - **5 star Gold** in Problem Solving, Python, JAVA, SQL, and BASH
- Object Oriented Programming in Python - Code with Mosh Certification
- Python for Data Science - NPTEL (**Silver + Elite**)
- Computational Thinking - Guvi