




# Vignesh Thanigaivel

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 8300829502



## Professional Summary

Web designer with a strong technical background, proficient in Python, HTML, CSS, and C. With extensive experience in server building, administration, and web development, I have a proven track record of designing and implementing robust web applications and server infrastructures over my freelancing projects. My expertise spans from front-end design to back-end server management. I thrive in dynamic tech environments, where I can leverage my skills to innovate and enhance user experiences. I am passionate about staying up-to-date with industry trends and continuously improving my craft to deliver high-quality, reliable solutions.



## Employment History

### Server Administrator, Freelance.

Jun. 2023 - Present

- Develop robust server and server software system for live streaming, media distribution and validation procedures.
- Monitor functioning of equipment to ensure system operates in conformance with specifications and requirements.
- Develop and maintain online media streaming platforms.
- Analyze information to determine, recommend, and plan installation of a new system and modification of an existing system.

### Server Design & Administration (Internship), RC Studios. Coimbatore, Tamil Nadu

Jul. 2024 - Aug. 2024

- Engineered and deployed Nginx-based servers to facilitate media streaming, multi-resolution packaging in a single RTMP output stream.
- Developed a client-side receiver utilizing HLS player technology for seamless media playback compatible with RTMP.
- Processed multiple formats and resolutions from a single media stream using FFmpeg.

### Wireless Sensor Networks (Internship), Indira Gandhi Centre for Atomic Research [IGCAR]. Kalpakkam, Tamil Nadu

Jun. 2024 - Jul. 2024

- I had designed a wireless packet loss testing mechanism using 25 Zigbee modules and Cortex M0+ based SAMD20 microcontroller, demonstrating my ability to work with wireless communication technologies and advanced microcontrollers.
- Gained knowledge and hands on experience of various wireless communication methods, microcontrollers, IEEE network protocols, serial communication interfaces, and more, to create efficient embedded systems.

### Website Design, FreeLance.

Mar. 2023

- Design, build and maintain web sites.
- Host websites on servers and maintenance.
- Install and configure hypertext transfer protocol (HTTP) servers and associated operating systems.
- Register, Renew and Maintain domain name registrations and DNS Records.
- Develop databases that support web applications and web sites.



## Education

**Vellore Institute of Technology, Vellore, Tamilnadu**  
B.Tech, Electronics and Communication Engineering with Specialization in Biomedical Engineering, 2026



## Skills

Web Development

Server Administration

Python

HTML, CSS

C

Microcontrollers & Robotics



## Languages

English

Tamil

Hindi



## Publications

### Cloud-Controlled Dynamic Smart Street Lighting System

R Rishab, S Sarumathi, Vignesh T A, Gokul Nittin A, Janani Shruthi B, Abhishek V, K Govardhan  
*2023 International Conference on Next Generation Electronics (NEleX)*  
Date of Conference: December 14-16, 2023  
Published in IEEE Xplore: February 16, 2024  
DOI: 10.1109/NEleX59773.2023.10420861