

Tirth Jain

CS UNDERGRAD

(+91) 7506309870 | f20190120@pilani.bits-pilani.ac.in | hedonhermdev.github.io | hedonhermdev

Education

Birla Institute of Technology and Science

Pilani, Rajasthan

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE (HONS)

May 2023

- Software Development Team Lead at ACM BITS Pilani
- Software Developer at Department of Visual Media

Experience

Assist (Startup)

Mumbai, India

DEVOPS ENGINEER

July 2020 -

- Managed deployment and scaling operations for a social media application with about **2000 users**.
- Deployed an architecture consisting of multiple services and databases using **Kubernetes** on **AWS**.
- Set up **autoscaling**, **load balancing**, and a **CDN** to handle the increasing load and a **CI/CD pipeline** to push new features faster.

SDET Lab, BITS Pilani

Pilani, India

TEACHING ASSISTANT (UNDER DR. YASHWARDHAN SHARMA)

August 2020 -

- Built and integrated a CMS with the university's website shared across four campuses.

Projects

Software Defined Networking (Ongoing) (Under Dr. K Hari Babu)

- Learned the P4 programming language to work with programmable switches.
- Working on a project to enable communication between switches in an SDN.

rPing

- Implemented the **ICMP** protocol in **Rust**.
- Used the ICMP protocol to make a clone of the popular **Ping** program.

UniversalCMS

- Used **Django** and **React** to develop (with one other teammate) a content management system that can integrate with almost any 'static' website.
- This CMS was adopted by the BITS Pilani University for its official website used across all four campuses.

Pi Face Detection Lights

- Built a system using a **Raspberry Pi**, a camera and LED lights to switch on the lights on my desk whenever I sit on the chair.
- Used TCP/IP sockets to continuously stream images from the Raspberry Pi to the image processing server.
- Developed an **HTTP API** for the lights to receive commands from the image processing server.

Skills

Languages Advance: Python, JavaScript | Intermediate: GoLang | Basic: Rust, C, Shell

Frameworks Django, Flask, Express

Technologies SQL Databases, NoSQL Databases, Neo4j, Kafka, Docker, Kubernetes AWS, Nginx, Unix

Achievements

EUvsVirus Hackathon Won 2nd place in the Real Time Communications and Prevention domain

JEE Advance All India Rank 2632

BITSAT Score: 387/450