Divyasheel Kumar

Indian Institute of Technology Mandi (B.Tech. (Comp. Science) - CGPA 8.1/10)

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💼 Work Experience

Sept 20th, 22 **May 20th, 22**	**Mentor (Google Summer of Code) | GSOC'22 , The Linux Foundation, Open Printing** › Was selected to mentor 2 projects for GSOC '22 in the org The Linux Foundation. `C` `gtk` `CUPS` `Python` `GNOME` `GNU/Linux`
August 27th, 21 **May 17th, 21**	**Student (Google Summer of Code) | GSOC'21 , The Linux Foundation, Open Printing** › Zeroconf browsing toolkit for listing and managing available IPP Print/Scan services (or DNS-SD-advertised network services in general) using Avahi. `C` `gtk` `CUPS` `Python` `GNOME` `GNU/Linux`
Jun 15th, 22 **Jan 3rd, 22**	**O.D.E.(Open Data Economy) Holdings, Arizona, Full Stack Developer Intern , REMOTE** › Developed the AWS back-end for a flutter application that enables you to automatically retrieve all your private data collected by 3rd party social media applications. `AWS (Lambda` `Event-Bridge` `CDK` `S3` `Gateway` `Cognito)` `Flutter` `Android Studio`
March 30th, 21 **Dec 14th, 20**	**Web Development Contract, School of Computing and Electrical Engineering, IIT Mandi** › Selected for a paid contract with the school to redesign, update and add to the department's official website. `Php` `MySql(PDO)` `Javascript` `HTML/CSS`

🏆 Achievements

2021	**Silver** - INTER IIT Technical (Security Hackathon)
2021	**First** - Hack30 Hackathon at IIT MANDI
2019	**2nd in C.S.E. branch (4th overall)** - URI Competitive Programming Contest at IIT Mandi
2020	**Cleared** - SysAdmin Test 2020 at IIT Mandi(**Submission**)

💻 Projects

PAAS for hosting with automatic real-time deployment on scalable hardware   May 2022
 github.com/divyashk/tech-meet

Developed a site that can deploy an application provided in the form of a docker container on a user provided subdomain. The hardware being any amount of multiple computers connected on a network. New instances of the same application are also created on different computers to achieve load balancing automatically, all the while retaining the same subdomain.

`Docker` `Nginx` `Flask` `Python`

Scalable Hospital Management System using Microservice Architecture   March 2022
 github.com/divyashk/tech-meet

In this project we used docker containers to create multiple instances of different/same micro-services and routed them through a gateway to remove congestion and increase scalability.

`Docker` `Nginx` `Flask` `Python`

Online Coding Platform - WeCode   March 2021
 github.com/Signior-X/hack30_2021

This is an online platform where people can code(live sharing), video call and draw(live sharing) illustrations on a white board together. This project stood first at Hack30 hackathon,IIT Mandi

`JavaScript` `Flask` `Socket-IO` `Firestore` `Python`

Live Server status using regex   September 2020
 github.com/divyashk/Server-status

This script provides live analysis about the issues faced by services on a remote UNIX server.

`Python` `REGEX` `SMTP` `GNU/Linux`

DNS-SD Tool for ipp(s)/http(s) services   Jun 2021
 Site   github.com/divyashk/GSOC21_summary

This project aimed at making the process of identifying and using the zero-conf services broadcasted through a mDNS network. This tool is housed inside the printing panel for gnome-control-center using the gtk library for the front-end and avahi-client to resolve services in the back-end. This tool can be used to navigate to the web interface for each service and also has some filters in place that reduces duplicates from different network interfaces.

`C` `Gtk` `Glade` `Avahi` `DNS-SD`

☰ SKILLS

Programming/Markup Languages	**C**(gtk,CMake),**C++**(stl,OOP),**Python**(Pandas,Numpy,SciPy,Jupyter-Notebook),**HTML5/CSS**(flexbox, bootstrap), **Javascript**(DOM, OOP),**Java**(OOP).
Infosec	Radare2, Ghidra, Metasploit, gdb
Frameworks	Flask, Django, Bootstrap, ExpressJS
Database Management	**SQL**(MySQL), **NoSQL**(Mongodb, Firestore)
System Administration	**GNU/Linux** (Debian, Arch), Apache, Nginx, bash/zsh/python
Others	VScode,Hadoop, Umbrello, PhpMyAdmin, XAMPP

✚ POSITIONS AND RESPONSIBILITIES

- **Core Team** Programming Club IIT Mandi
- **Core Team** S.A.I.C.(System Administration and Infosec Club IIT Mandi)
- **Organized and Conducted** Tartarus CTF 2021 at IIT Mandi.
- **System Administrator** for the public facing college SNTC server.
- **Mentor** Guidance and Counselling Services(G.C.S.) IIT Mandi.
- **Co-Coordinator** NSS IIT Mandi.