

Education

Himachal Pradesh, India	Indian Institute of Technology Mandi	Aug 2018 – Jun 2022
<ul style="list-style-type: none">Bachelor of Technology in Computer Science and Engineering, CGPA: 9.33Relevant Courses: Data Structures and Algorithms, Mathematical Foundation of CS, Formal Language and Automata Theory, Advanced Database Practicum, Information and Database Systems, Computer Organisation, Game Development, Operating system and Networking, Paradigms of Programming.		

Internships & Mentorships

S.D.E. Intern	Microsoft	Jun 2021
<ul style="list-style-type: none">Azure Dedicated Telemetry Designing a telemetry to provide insights about the health status of Infiniband devices. Also Involved using REST APIs, designing unit tests apart from the framework design. <i>Python, Docker, Kubernetes, Geneva, Jarvis</i>.		

Research Intern	Arista Networking	Dec 2020
<ul style="list-style-type: none">Spatial Reuse in 802.11ax Research, Study of application of Spatial Reuse applied to the Access Points packed densely in an environment to increase the total area throughput of the High Throughput packets. The current study involves the use of Wifi 6 (802.11 ax) for the purpose. <i>Matlab, Simulink</i> Entire report available here.		

Mentorship Programme	The Linux Foundation	Aug 2020
<ul style="list-style-type: none">OpenPrinting With sandboxed packaging, Linux Open-Printing requires drivers being provided as Printer Applications. Built a sample chroot environment for Epson printer driver can be seen here. Further scope of the project lays in making inclusions into automating the process for users to easily design printer drivers for arbitrary printer drivers. <i>C, C++, Linux</i>		

Data Analysis	S.C.L. (Department of Space)	June 2020
<ul style="list-style-type: none">Increasing the yield efficiency of Silicon chips Responsible to analyse the data collected during fabrication of semiconductor devices that could further be trained using DL to improve the yield obtained. Entire report available here <i>Python3, pandas, Matplotlib, Scipy</i>		

Languages and Technologies

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- Scheme, Prolog, NASM, C, C++, Python3, Javascript, Matlab, SQL, Android, Hadoop (Java), Django, Node.js (MEN stack), Linux, bash, Latex, Visual Studio, Android Studio, Unity Game Development*

Projects

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- SpaceWars** (2020). game revolves around a spaceship wandering in space. The spaceship shoots laser beams to attack enemy spaceships that enter the verse as time progresses. - *C#, Unity Game Engine* - **codebase**
 - Kalpana Chat-Bot** (2020). designed to give insights for initial induction to the freshers at IIT Mandi. Bot available on telegram (self-hosting). The bot contains answers for queries including important academic documents, Technical Clubs, Cultural events at IIT Mandi. Modeled using self-tailored data on BERT. - *Telegram API, Python, Tensorflow, BERT pre-trained* - **codebase**
 - Vishwa-Setu** (2020). A portal aimed at rejuvenating the interest in the language of Sanskrit. Learn vocabulary, create Sanskrit quotes, follow friends, or apply OCR on Sanskrit text. - *Django, Python, JS* - **codebase**
 - HP-STSE** (2020). A portal to automate the initial process of State Talent Search Examination Examination in Himachal Pradesh. The project is carried out in association with IIT-Mandi's faculty Dr. Arti Kashyap. - *PHP, SQL, JS* - **codebase**
 - Army Canteen Scheduler** (2020). An automated interface to manage/request bookings for groceries or liquor at Army canteens. Configurable entities, such as holidays, can be tweaked through the admins anytime. - *PHP, SQL, JS* - **Production-link**
 - Landslide Data Collection game** (2019-2020). Research-based game: study reaction of humans to invest in disaster protection before and after calamity takes place. - *PHP, SQL* - **Production-link** - **codebase**

Additional Experience and Awards

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- Inter-IIT Techmeet, Bronze Medalist** Bronze medal during DataScience contest conducted at Inter-IIT 2019.
 - Teaching Assistant, IIT Mandi** Technical Assistant for Computer Science courses of IDS, DSA and MFOCS.
 - Coordinator-Robotronics Club, IIT Mandi** POR - managing student activities, core team and finances of the club.
 - Web Developer** Developed/Maintaining websites: [Robotronics Club-IIT Mandi](#), [Rann-neeti 2019](#), [IIT Mandi Student Gymkhana](#).
 - NSS Prayas Coordinator** Intended to teach the underprivileged students. Taught as well as coordinated other volunteers.