HRITVI NARENDRA BHANDARI

B.Tech. Computer Science and Engineering
UG(III Year I Semester)
Contact No: 9033650221
Email: hbhandari@cs.iitr.ac.in
Registration No: B.Tech./CSE/17114039/2020

Indian Institute of
Technology
Roorkee

Area of Interest

Algorithms and Data Structures, Open Source Development, Operating Systems, Machine Learning.

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2019	B.Tech. 2nd Year	Indian Institute of Technology, Roorkee	*8.742*
2017	Twelfth	S.D. Jain Modern School, Surat (CBSE)	*95.0 %*
2015	Tenth	S.D. Jain Modern School, Surat (CBSE)	*10.0*

Internships

Outreachy | Mozilla - Firefox Accounts   May, 2019 - Present
- Responsible for improving and modernizing the user settings web application for Firefox accounts.
- Migrated the present Backbone based app to React.
- Wrote unit tests and functional tests to support the migration.

Summer Research Intern | IIT Bombay   June 2018 - July 2018
- Worked on Face detection algorithms (RCNN, Fast-RCNN, Faster-RCNN, YOLO) on VGG-16 architecture and trained on Widerface dataset.
- Used technologies like iPython Notebooks, Tensorflow and Tensorboard.

Projects

CodeVillage | IIT Roorkee   May 2018 - Present
- An online competitive programming platform with its own judge; holds regular competitions with intl. participations.
- Created an optimized way to handle testcases using Github REST API, reducing deployment time by approximately 50%.
- Engineered a pseudo-admin panel to create closed contests using Lumen MVC-framework and Redis queues.

Hedwig | IIT Roorkee   Dec 2018 - Present
- A flexible and customizable chat plugin for modern web applications built with Node.js and Express framework.
- Improved the architecture to make it support multi-tenants and making the app workspace and organization agnostic.

Music Recommendation Engine | IIT Roorkee   Jan 2019 - Present
- A music recommendation system built using content based collaborative filtering.

SIC/XE Assembler | IIT Roorkee   24th Feb 2019 -10th Mar 2019
- Implemented SIC/XE assembler in C++.
- Supports error handling, prompts, literals, equs, expression and program blocks.

Scheduling Policy | IIT Roorkee   29th Jan 2019 - 6th Feb 2019
- Explored Linux kernel scheduler source tree, understanding existing policies.
- Added a new process scheduling policy in the kernel source tree.
- Benchmarked the new policy against existing ones by simulating it on CPU-Intensive Processes.

Embedded System using Pi and Arduino kit | IIT Roorkee   24th Feb 2019 -10th Mar 2019
- Implemented a Bluetooth beacon for advertising URL using Raspberry Pi.
- Developed a program to play melodies using Arduino Kit and a piezo buzzer.

Awards / Scholarships / Academic Achievements

- Secured world rank 45 in "Google Code Jam to I/O", 2019 for women and won a ticket to Google I/O 2019.
- Won a scholarship to attend Open Source Summit + Embedded Linux Conference Europe 2019.
- All India Rank 428, Joint Entrance Examination Advanced, 2017.
- Top 3 in Microsoft Code.Fun.Do online hackathon, 2018.

Skills

Computer languages   PHP, JavaScript, Node.js, C/C++, Python, Java, SQL, HTML/CSS, Jekyll
Software Packages   Git, ReactJS, Linux, GDB, Laravel, Apache, Django, Flask, Vue.js, Vim
Languages Known   English (SRW) , Hindi (SRW)

Positions of Responsibility & Extra Curriculars

Developer | SDSLabs   Jan, 2018 - Present
- Involved in maintaining and developing applications for campus students as well as those open to the internet.
- Regularly conducted hackathons, public lectures, and competitions to foster the technical culture in the campus.

Member | Programming and Algorithms Group   Aug, 2018 - July 2019
- The group aims to help build an environment of mutual growth and an active coding culture in the campus.
- Responsible for organizing, curating and testing programming problems for competitions, and conducting lectures on Data Structures and Algorithms.

Head of Web Development | Watchout 2018 - Present
- Responsible for maintaining the website for the official media body of IIT Roorkee.

Member | IIT Roorkee Basketball Team 2017 - 2018
- Secured Second position in Sangram, 2018.
- Represented IIT Roorkee basketball team in Sportech 2018, IIT Delhi.

Member | Geek Gazette 2017 - 2018
- A student group making technical content accessible to the community of IIT Roorkee.
- Responsible for handling the web infrastructure.

Hackathons
- Vizualized LiDAR dataset by rendering it in AR and VR using A-Frame in the Grand Finale of Smart India Hackathon, 2019.
- Built a 3D game on unreal engine for Oculus rift in Microsoft Code.Fun.Do, 2018 online round.
- Made an incentive driven decentralized review system on a public blockchain in HackInOut, 2018.
- Implemented a marketplace for sharing of deployment and storage services in HackInTheNorth, 2019.

References

Shane Tomlinson
Staff Software Engineer/Tech Lead
Mozilla
stomlinson@mozilla.com
+44 7475 500 937

Biplab Banerjee
Assistant Professor
IIT Bombay
bbanerjee@iitb.ac.in
+91-022-25727688