Dhruv Bhanushali

Junior, Bachelor of Technology
Engineering Physics (EPh)

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Indian Institute of Technology,
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Education

Year	Institute	CGPA/Percentage
2015-2019	Indian Institute of Technology, Roorkee – *B. Tech. in Engineering Physics*	7.433
2014	Jaipuriar School, Navi Mumbai – *Class XII*	91.2%
2012	Seventh-Day Adventist Higher Secondary School, Navi Mumbai – *Class X*	95.8%

Internships

Software developer – *HackerEarth, Bangalore*

Developed a code evaluator that evaluates Ant-Java projects by running JUnit tests and also evaluating their output with the given input to score the project. This is used by HackerEarth to test the project development ability of candidates.

Projects

Augmented virtual keyboard – *Electronics and computer vision development*

This project uses an array of infrared lights and a simple webcam to locate all positions of finger taps and then uses computer vision libraries in Python to translate those into keypresses on the connected computer.

LecTut – *Android app development*

LecTut is the online study portal of IIT Roorkee, where all study material such as lecture notes, slides and tutorial sheets are found. This app provides a fluent native experience to access LecTut and study on one's mobile phone.

Nobel – *Node.js app development*

Nobel is used to ping a computer in a remote location and enter a chatroom hosted at that location, allowing IMG members to contact colleagues in the lab from their hostel rooms via a multiuser chat.

Parche – Spring and Angular app development

Parche is a bug tracking system being developed in-house by IMG, to replace Bugzilla, and be tailored to the specific needs of IIT Roorkee. Parche aims to be fully customizable and is free and open source software.

Rethink – *Django app development*

Rethink is a web application for the tinkering lab of IIT Roorkee to be able to manage their resources such as raw material and also utilize time by optimally allocating time slots to students applying for them.

Official memoranda – Django app development

Official memoranda is used by the IIT Roorkee administration to publish official memoranda. These memos can be uploaded, accessed and deleted by people with very specific administrative roles.

Freshmen registration – Django app development

Freshmen registration is the application that allows all freshmen each year to log in to the registration portal of Channel i and get accounts on the digital lifeline of the campus. It uses secret codes to authenticate the first login of the user.

Personal portfolio website https://dhruvkb.github.io/ - JavaScript website development

My personal portfolio website on GitHub pages is a vanilla JavaScript-based website designed to look and act like the terminal emulator from GNOME. The website uses tree to traverse through the emulated file system.

Channel i – *App containerization, restructuring and upgradation*

Channel i is the one stop portal for all digital needs of IIT Roorkee. This project pertains to the upgradation of Channel i to a newer framework and also restructuring it to be containerized with Docker, load-balanced and future-proof.

Positions of responsibility

Project leader – *Information Management Group, IIT Roorkee*

As a project leader of IMG, I worked on maintaining the online placement portal and also focused on porting Channel i to a newer version of Django, while restructuring it to be extensible, containerizing it for both development and deployment with Docker containers and also supervised the day to day functioning of IMG as a group.

Organizer and teacher – *Dynamic web application workshop, IIT Roorkee*

With the help a team of my peers, I organized a code-along workshop and then took up half of a lecture on building dynamic web applications with PHP and MySQL. This workshop was a success and saw a participation of more than one hundred and fifty freshmen and sophomores.

Local organizing committee member – *Indo-Japan Accelerator School, 2017*

As a member of the LOC, I developed the registration website of IJAS 2017, hosted it on IIT Roorkee servers with the help of IMG and also oversaw the on-site technical support for the duration of the conferences and seminars.

Skills

Software applications:	Wolfram Mathematica, MathWorks MATLAB + Simulink, Docker, Jupyter, iPython, NI Multisim, Vim, Git, JetBrains IDEs, Postman, Adobe Creative Suite, SQL and NoSQL databases

Languages

Computer languages:	Java, Python, Kotlin, C++, JavaScript, PHP, Fortran 77, Rust
Human languages:	English (SRW), Hindi (SRW), Marathi (SRW), Gujarati (SRW), Kutchi (S)

Frameworks

Java:	Spring MVC, Android, Swing and JavaFX
Python:	Django, Django REST, NumPy and SymPy
Kotlin:	Android
Node.js:	Express, Socket.IO and Adonis
JavaScript:	Angular and React

Achievements:

- Ranked AIR 3110 (GEN) in JEE Advanced.
- Created two apps for two code.fun.do 24-hour hackathons hosted by Microsoft.
- One of the most prolific developers in IMG (and therefore, in IIT Roorkee).

Interests:

Apart from software development I am also interested in theoretical Physics. I like to unwind with a good film or TV series episode. You'll find me plugged to my music almost all the time, a collection which I have meticulously collected and. I also like to read (almost every genre) and write (humour and non-fiction).

References:

Dr. Puneet Jain
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Details:

For further information, please contact me via any of these social media:

GitHub portfolio	https://dhruvkb.github.io/
GitHub profile	https://github.com/dhruvkb/
IIT Roorkee	http://students.iitr.ac.in/15122009/
LinkedIn	https://www.linkedin.com/in/dhruvkb/
Facebook	https://www.facebook.com/dhruv.k.bhanushali/