



# Dhruv Bhanushali

Technical author  
Graduate, IIT Roorkee

✉ dhruvkb@ph.iitr.ac.in  
☎ +91 8171615670

🌐 /dhruvkb    /dhruvkb    /dhruv.k.bhanushali    /dhruvkb\_

## Areas of interest



- Server-side infrastructure engineering and dev-ops
- Cross-platform and full-stack web and app development
- Software architecture, planning, design and documentation

## Achievements



- Google Summer of Code 2019 intern at Creative Commons.
- Scored AIR 3,110 out of 1,50,000 in JEE Advanced 2015.

## Education



### Indian Institute of Technology Roorkee

📅 2015 - 2019

B. Tech.  
Engineering Physics

## Internships



### Infrastructure engineer

📅 May - July, 2018

HackerEarth  
Bengaluru, India

- Wrote the HackerEarth *infrastructure-as-code* (IaC) after in-depth analysis of their production architecture.
- Developed the Python tools to replicate the infrastructure by deploying the IaC in an alternate AWS AZ.
- Developed an EC2 instance launch and termination engine.
- *Isolated staging and production* in separate VPCs.
- Enabled deployment of new staging VPCs in one click.

### Software developer

📅 May - July, 2017

HackerEarth  
Bengaluru, India

- Developed a *code-evaluation engine* to build, execute and evaluate multi-file Java projects using Ant.
- Developed the RabbitMQ *scaffolding architecture*.
- Added database-agnostic *JDBC connectivity*.
- Installed *security policies* such as memory and I/O limits.

## Positions of responsibility



### Chief technology coordinator

📅 2016 - 2019

IMG  
IIT Roorkee

Information Management Group (IMG) is the student body that developed, manages and upgrades both the content management system for the IIT Roorkee website and Channel i, the official intranet portal.

- Pivoted the role of IMG in the campus from an app development group to a platform development group.
- Created Omniport, the rewritten open-source portal of IIT Roorkee replacing Channel i and updating its suite of apps.
- Initiated, lead and oversaw a total overhaul of IMG's core products to the latest software stack and technology.
- Mentored and tutored a team of over 50 developers and designers, at both the macro and micro levels.
- Shortened development cycles at IMG by up to 50% with a modular, containerised and isolated approach.
- Increased the IMG's outreach via social media and cultivated a brand-conscious mindset about our products.
- Developed a culture of open-source at IMG and set the institute record of 30 repos open-sourced in one day.
- Lead IMG, and consequently IITR, to the highest selections in GSoC ever: 10 (out of 35) in 2018 and 13 in 2019.

## Skills



### Computer languages and frameworks

Python (+Django, Django REST Framework), Java (+JavaFX, Ant), JavaScript/Node.js (+Express, React, Angular, Vue, Jest), Kotlin (+Android), reStructuredText (+Sphinx), PHP, FORTRAN, L<sup>A</sup>T<sub>E</sub>X, Bash, C++, Golang

### Computer software and skills

Git, Docker (+ Compose), Ansible, Puppet, UFW, Travis, Sentry, Celery, RabbitMQ, SQL & NoSQL databases, iPython, Jupyter, NumPy, SymPy, MathWorks MATLAB, Adobe Creative Suite

## Writings



### Omniport

📅 March 2018 - Present

Campus portal platform

📖 Django; React

- Omniport is a *platform for institutes* to deploy their web portal (like Channel i for IIT Roorkee), by and for the students.
- Omniport is completely generic, but offers various levels of customisability, to suit the needs of any institute worldwide.
- Omniport can be extended with plug-and-play apps and can function as an OAuth2 provider for third-party integration.
- Supports the latest features such *HTTP/2*, real-time *WebSockets*, progressive web apps and role-based access.
- Developed the entire Django backend *solo*, including all core apps and services, and integrated with the React frontend.
- The entire code of the project has been documented using PyDoc and JSDoc compatible documentation.
- These in-code comments and documentation are exported to Sphinx.

### Omniport documentation

📅 March 2018 - Present

Holistic documentation

📖 Sphinx; reStructuredText

- Wrote the documentation of the *philosophy, architecture and backend* of the portal, and reviewed that of the *frontend*.
- The documentation includes tutorials, how-to guides as well as in-depth references apart from in-code documentation.
- Deployed a live and automatically updated version of the documentation to ReadTheDocs.
- All the documentation is open-source and licensed under the GNU Free Documentation License.

### Blogs

📅 Occasional, intermittent

Thoughts to words

📖 WordPress; Medium

I sometimes write blog posts on various experiences from my life, both technical as well as non-technical.

- "Life As A Member of IMG" on Medium
- "Some lessons from an old IIT from a new one" on Medium
- Blogs about CC Vocabulary on Creative Commons.

## Open source contributions



### CC Vocabulary

📅 March 2019 - Present

Design system, component library

📖 Vue, Styleguidist

- Creative Commons is a non-profit that develops licenses and tools to make sharing and remixing creative work easy.
- Contributed features and patches to the CC Catalog API.
- Created CC Vocabulary, a design system and component library to convert mockups to functional applications fast.
- Deployed the styleguide, documentation, component playground and examples showcase to GitHub Pages.
- Incorporated CC Vocabulary into the revamped CC Search.