Dhruv Bhanushali
Software developer

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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
- Technical/non-technical documentation, blogs and articles

Education 🏛

Indian Institute of Technology Roorkee
Bachelor of Technology (B. Tech.)
📅 2015 – 2019
Engineering Physics

Experience 💼

Software engineer
FamPay
📅 November – December, 2019
📍 Bengaluru, India

- Wrote the core transaction API of the platform.
- Integrated with the Cashfree payment gateway.
- Developed transaction SMS notification system.
- Developed the support engine of the platform.

Software engineer
Creative Commons
📅 April – September, 2019
Google Summer of Code

- Developed Vocabulary, a cohesive design system.
- Revamped the UI of CC Search, powered by Vocabulary.
- Initiated Vocabulary integration into other CC projects.
- Contributed features and patches to the CC Catalog API.

Infrastructure engineer
HackerEarth
📅 May – July, 2018
📍 Bengaluru, India

- Wrote the IaC for the entire production architecture.
- Wrote tooling to deploy the IaC in an alternate AWS AZ.
- Wrapped Boto3 in a Python + Django web-environment.
- 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 engineer
HackerEarth
📅 May – July, 2017
📍 Bengaluru, India

- Wrote a code-evaluation engine to evaluate Java projects.
- Wrote tooling to automatically build and execute projects.
- Wrapped Ant in an async message-based Python evaluator.
- Developed the scaffolding architecture using RabbitMQ.
- Added provider-agnostic database connectivity using JDBC.
- Installed security policies such as memory and I/O limits.

Chief technology coordinator
Information Management Group
📅 2016 – 2019
📍 IIT Roorkee

Information Management Group (IMG) is the student body that developed, manages and upgrades both the content management system powering the IIT Roorkee website and Channel i, the official intranet portal.
- Pivoted IMG as a group from app to platform development.
- Replaced Channel i, and its suite of apps, with Omniport.
- Piloted a complete upgrade of the stack and technology.
- Mentored a team of over 50 developers and designers.
- Halved timelines by replacing the development paradigm.
- Containerised and isolated the development process.
- Fostered OSS culture with a record 30 repos open-sourced.
- Lead IMG to 10 and 13 GSoC selections in 2018 and 2019.
- Reinvigorated IMG's popular image on social media.

Skills 💡

Computer languages (+frameworks)

reStructuredText (+Sphinx), Python (+Django, Django REST Framework), Java (+Swing, JavaFX, Ant, Android), JavaScript/Node.js (+Storybook, Styleguidist, Jest, Vue, Vuex, Vue Router, React, Angular), Kotlin (+Android), CSS (+Stylus, Sass), Ruby (+Rails), Golang, Bash, C++, FORTRAN, PHP, HTML, Markdown *and, of course,* $\LaTeX$

Computer software

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

Open source 🔓

Vocabulary
Design system
📅 May 2019 – Present
🗄 Vue, Styleguidist, Storybook

Vocabulary is a cohesive design system to unite the web facing Creative Commons ©.
- Developed close to 40 components for the project.
- Wrote the documentation and styleguide for the library.
- Developed an interactive playground for the components.
- Deployed all these products to GitHub Pages and Netlify.
- Identified easy issues to encourage beginner contributors.
- Published the library to npm, jsDelivr and unpkg.

Omniport backend
Campus portal platform
📅 March 2018 – Present
🗄 Django; React

Omniport is a platform for institutes to deploy their web portal (like Channel i by IMG for IIT-R), by and for the students.
- Planned it to be unopinionated to suit any institute's needs.
- Developed Omniport to be generic but customisable.
- Developed extension capability with plug-and-play apps.
- Developed latest features such HTTP/2 and WebSockets.
- Added OAuth2 provider functionality for 3rd-party auth.
- Launched as a mobile responsive progressive web app.
- Composed the Django backend, all core apps and services.
- Integrated with the React frontend and deployed on Docker.

Omniport infrastructure
Container deployment
📅 March 2018 – Present
🗄 Docker (+Compose); Bash

Omniport is a platform for institutes to deploy their web portal (like Channel i by IMG for IIT-R), by and for the students.
- Replaced old monolithic architecture with microservices.
- Containerised core and scaffolding services with Docker.
- Planned the infrastructure to be elastic and cloud native.
- Automated scaling, redundancy and reproducibility.
- Bash scripted image and container creation and tear-down.
- Deployed proofs-of-concept in dev and prod environments.

Projects 🗃

Placement & Internship portal
Omniport application
📅 August – November, 2018
🗄 Django; React

Placement & Internship portal digitises the entire placement process, including creating the official IIT Roorkee résumé, applying to companies and knowing the results.
- Added features to the app like test and interview calendar.
- Added the ability to submit a cover letter with application.
- Mentored developers of the revamped Omniport version.
- Mentored the developers of the Android companion app.