Dhruv Bhanushali

I am a **software developer**.

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Education

IIT Roorkee
Graduated 2019

Bachelor of Technology (B. Tech.) — Engineering Physics

Open source projects

Vocabulary
Since May 2019

https://opensource.creativecommons.org/vocabulary/

Vocabulary is cohesive design system & Vue component library to unify the web-facing Creative Commons.

Design system
JavaScript (Sass; Vue; Storybook)

- Planned the tech-stack & higher-order repository structure.
- Developed Sass styles and corresponding Vue components.
- Integrated the documentation with an interactive Storybook.
- Set up automated CI/CD pipelines for docs and builds.
- Continue to triage issues & review PRs as a maintainer.

Omniport
Since Mar 2018

https://omniport.readthedocs.io/

Omniport is an end-to-end platform and app ecosystem for institutes to deploy their web portal, by and for the students.

Infrastructure
Docker; Bash

- 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.

Backend
Python (Django; DRF)

- 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 as 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.

Documentation
reStructuredText (Sphinx)

- Documented the design choices & underlying philosophy.
- Documented the architecture, frontend and backend.
- Wrote helpful tutorials, how-to guides and FAQ.
- Wrote in-depth reference material for functions and utils.
- Deployed an always up-to-date version on ReadTheDocs.
- Open-sourced and licensed docs under the GNU FDL.
- Documented the entire codebase using PyDoc and JSDoc.

Portfolio
Since Mar 2018

https://dhruvkb.github.io/

My portfolio is my small personal slice of the Internet. The entire suite has automated CI/CD pipelines for deployment. The readable codebase is fully documented & open-source.

Personal website
JavaScript (Sass; Vue); TypeScript

- Rebuilt online portfolio on the principles of JAMStack.
- Integrated a highly functional 'terminal emulator'-emulator.
- Deployed as a static site & progressive web application.
- Hosted a blog with GitHub APIs & TS serverless functions.

Résumé
LaTeX

- Crafted résumé with highly modular & functional LaTeX.
- Fine-tuned the typesetting for the document to fit one page.

Experience

BrowserStack
Mumbai, IN

https://www.browserstack.com/

Software engineer
Since Feb 2020

- Identified & fixed issues tantamount to a GDPR breach.
- Built audit logs to prevent, detect & alert for breaches.
- Integrated all email providers with the Central Email System.
- Created system to track & visualise email engagement.
- Set up systems to improve email deliverability & reputation.

Creative Commons
Remote

https://opensource.creativecommons.org/

Open source community coordinator
Since Jul 2020

- Identified, organised & triaged issues & reviewed PRs.
- Onboarded & mentored new open source contributors.
- Coordinated, nurtured & grew the FOSS community.
- Maintained the open-source site and automation workflows.
- Increased reach & engagement of the official Twitter handle.

Open-source mentor
Since Dec 2019

- Onboarded & guided applicants through the processes.
- Reviewed, scored & ranked proposals from candidates.
- Mentored in
  - Google Season of Docs — Sep – Dec 2020
  - Outreachy summer iteration — May – Aug 2020
  - Outreachy winter iteration — Dec 2019 – Mar 2020

Google Summer of Code developer
May – Aug 2019

- Conceived, designed & developed Vocabulary from scratch.
- Initiated & supported Vocabulary integration with CC sites.

HackerEarth
Bangalore, IN

https://www.hackerearth.com

Infrastructure engineer
May – July 2018

- Wrote the IaC for the entire production architecture.
- Wrote tooling to deploy the IaC in an alternate AWS AZ.
- Developed an EC2 instance launch and termination engine.
- Wrapped Boto3 in a Python (Django) web-environment.
- Isolated staging env from production in a separate VPC.
- Enabled one-click VPCs replication in staging environments.

Software engineer
May – July 2017

- 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.

Information Management Group
IIT Roorkee

https://img.channeli.in/

Information Management Group (IMG) is the student body that developed, manages and upgrades both the CMS powering the IIT-R website and Omniport, the official intranet portal.

Chief technology coordinator
2016 – 2019

- Pivoted IMG as a group from app to platform development.
- Upgraded the legacy portal, tech stack & apps to Omniport.
- Containerised, decoupled & stabilised dev processes.
- Halved timelines by revamping the development paradigm.
- Mentored a team of over 50 developers and designers.
- Fostered OSS culture by open-sourcing 40+ repos.
- Led IMG to 10 and 13 GSoC selections in 2018 and 2019.
- Reinvigorated IMG's popular image on various social media.

Other skills

Java (+Swing, JavaFX, Android), Kotlin (+Android) Ruby (+Rails), Swift (+SwiftUI), Golang, Rust, C++, PHP & Bash