

# Dhruv Thakur

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## SUMMARY

Software Engineer with 6 years of experience building backend systems for e-commerce and user feedback SaaS platforms, and a large multinational bank.

## PROFESSIONAL EXPERIENCE

<b>firstbird</b> , <i>Backend Engineer</i> 📄	May 2022 – present Vienna, AT
<b>deepLYNX</b> , <i>Back End Developer</i> 📄 <ul style="list-style-type: none"><li>• <b>Code releases</b>: Worked as "release master" alongside regular role; responsible for deploying new versions of the codebase, and ensuring bug-free releases</li><li>• <b>APIs</b>: Worked on back-end APIs supporting customer facing product features (<i>fastapi, graphql, ECS</i>)</li><li>• <b>Async workloads</b>: Worked on back-end systems that ingest/egest data from/to third party ecommerce systems (<i>ECS, SQS, airflow</i>)</li><li>• <b>Infrastructure as Code</b>: Modeled existing AWS resources as code for faster iterative deployments (<i>AWS CDK</i>)</li><li>• <b>CICD</b>: Designed and implemented a multi-project CICD pipeline from scratch (<i>AWS CDK, CodePipeline, Github Actions</i>)</li><li>• <b>ORM</b>: Set up SQLAlchemy from scratch, to be used by back end systems</li><li>• <b>Tests</b>: Set up code testing (including linting, type checking) from scratch (<i>pytest, mypy</i>)</li><li>• <b>Structured Logging</b>: Overhauled logging across multiple projects to improve bug discoverability (<i>datadog, sentry</i>)</li><li>• <b>ETL</b>: Set up a scheduled ETL system to be directly used by our customers (via sftp) (<i>pandas, AWS CDK, AWS Transfer</i>)</li><li>• <b>Reporting</b>: Added analytics report generation tools for customers to get more insights into business metrics (<i>pandas, fastapi</i>)</li></ul>	Mar 2021 – Apr 2022 Vienna, AT
<b>Usersnap</b> , <i>Senior Backend Developer</i> 📄 <ul style="list-style-type: none"><li>• <b>3rd Party Integrations</b>: Created integrations to let Usersnap users send feedback items to 3rd party platforms (like Github), webhooks, and email.</li><li>• <b>Product Features</b>: Worked on the back end to add features like screenshot comments, attachment upload to feedback, new project types, notification emails, etc. (<i>Flask, celery, SQLAlchemy, Postgres, pytest</i>)</li><li>• <b>Authorization</b>: Added JWT authorization to Usersnap's consumer API.</li></ul>	Jun 2020 – Mar 2021 Vienna, AT
<b>TourRadar</b> , <i>Backend Engineer</i> <ul style="list-style-type: none"><li>• <b>Search and Ranking</b>: Serving and productionizing Machine Learning models (<i>Flask, fastapi, AWS ECS</i>)</li></ul>	Dec 2019 – May 2020 Vienna, AT
<b>HSBC</b> , <i>Senior Software Engineer</i> <ul style="list-style-type: none"><li>• <b>CICD on GCP</b>: Infrastructure management and Microservice deployment on GKE (<i>Terraform, GKE</i>)</li></ul>	Mar 2019 – Oct 2019 Hyderabad, IN
<b>HSBC</b> , <i>Software Engineer</i> <ul style="list-style-type: none"><li>• <b>Data Processing on GCP</b>: Wrote GKE CronJobs to log data onto various GCP databases (<i>Pub Sub, GKE, BigQuery, Data Store</i>)</li><li>• <b>Business Rules</b>: Wrote a microservice to encapsulate business rules for a Credit Decision Engine (<i>Drools, Spring, MongoDB</i>)</li><li>• <b>Credit Bureau</b>: (<i>poc</i>) Created a data ingestion system to incorporate data from external credit bureau vendors to HSBC credit approval application. Created a front-end to display analysed data. (<i>Flask, MongoDB, node, chart.js</i>)</li><li>• <b>Data Warehouse</b>: Wrote data processing pipelines on GCP to migrate data from on-prem warehouses, perform ETL and delta-processing, and generate daily snapshots (Cloud Dataflow, Apache Beam, BigQuery)</li><li>• <b>Customer Calls Analysis</b>: (<i>poc</i>) Created a platform/dashboard to generate real-time sentiment scores on customer center calls. This solution won first prize at CodeGrind, HSBC India's nation wide coding competition (<i>Cloud Speech, Cloud NLP, Cloud Functions, Pub-Sub, Flask, socket.io, chart.js</i>)</li></ul>	May 2017 – Feb 2019 Hyderabad, IN
<b>HSBC</b> , <i>Software Engineer</i> <ul style="list-style-type: none"><li>• <b>Core Banking APIs</b>: Created APIs for modern clients to interact with a legacy core banking application (<i>Mule ESB</i>)</li><li>• <b>Internal HR application</b>: Created modules on an internal HR web-application (<i>Spring, Dojo</i>)</li><li>• <b>Internal Emails Classifier</b>: (<i>poc</i>) Created a multinomial logistic regression model for classifying internal emails (<i>Tensorflow</i>)</li></ul>	Jun 2016 – May 2017 Pune, IN

## PERSONAL PROJECTS

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- **handy-maps** [↗](#) : A website to visualize public data from various US govt. institutions.
- **album-art-genre-classifier** [↗](#) : Image classifier API that predicts music genre from uploaded album art.
- **grad-cam-visualizer** [↗](#) : Experiments in generating class discriminative localization maps from trained convnets.
- **book-lending-marketplace**: An online marketplace for fellow college students to lend/sell books; ran website for a few months.

## EDUCATION

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**Udacity**, *Intro to Self-Driving Cars Nanodegree* [↗](#)

Feb 2019

**National Institute of Technology, Hamirpur**,

*Bachelor of Technology in Electronics and Communications Engineering*

Aug 2012 – May 2016

Hamirpur, IN

## SKILLS

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- **Web**: fastapi, flask, GraphQL, django, , spring
- **Programming Languages**: python, java, JavaScript, SQL, CSS, HTML, latex
- **Other**: pytest, celery, matplotlib, pandas, seaborn, apache beam
- **DevOps**: docker, AWS CDK
- **Databases**: postgresSQL, BigQuery, MySQL
- **Cloud**: GCP, AWS

## MOOCS AND CERTIFICATIONS

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Visit <https://dhruvs.space/learnings/> [↗](#)