

# HARSHIT RUWALI

Software Engineer

[ruwaliharshit@gmail.com](mailto:ruwaliharshit@gmail.com) ♦ [GitHub](#) ♦ [LinkedIn](#) ♦ [harshitruwali.github.io](https://harshitruwali.github.io)

## WORK EXPERIENCE

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### Sr. Software Engineer

Jun 2024 - Current

BHIVE Workspace

- Built and maintained the data platform handling batch processing pipelines and analytics. Owned end-to-end: ETL architecture, data warehouse design, vendor integrations, and infrastructure.
- Designed and built an in-house data ingestion and ETL platform using Python and DBT to transform and load normalized data into a Star Schema warehouse, enabling unified analytics and cross-system reporting.

Tech Stack: Python, DBT, PostgreSQL, AWS

- Built custom internal data libraries and utilities for the team, reducing development time for data tasks.
- Contributed to the Reconciliation module, automating validation between customer payments and issued invoices, reducing manual intervention and ensuring financial data consistency.
- Managed platform infrastructure, deployments, and monitoring across AWS.

### Backend Engineer

Sept 2022 - May 2024

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- Led key initiatives in migrating to a serverless microservices architecture, integrating Priceline vendors, and optimizing flight and hotel booking workflows - reducing packaging time from 30s to 5s.

Tech Stack: Python, FastAPI, Docker, MongoDB, Kafka, AWS CDK, AWS Step Functions, AWS Lambda

- Developed and maintained core mobile backend features, launching 4 major enhancements that boosted user engagement by 30%.

Tech Stack: NodeJS, JavaScript, MySQL, Redis, AWS Lambda, AWS EFS, Serverless Framework

- Resolved AWS API Gateway 29s timeout by introducing Redis-based response caching and chunked delivery for large payloads.

## PROJECTS

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### PostgreSQL Extensions in Rust

2026

- Built a production-grade PostgreSQL extension in Rust using unsafe FFI bindings to extend database capabilities at the system level.
- Deployed and tested in RDS environments. Published [documentation and technical blog posts](#).

Tech Stack: Rust, PostgreSQL, FFI, unsafe Rust

### Personalised Voice Assistant with Speaker Identification

Aug 2020 - Jan 2022

- Developed a personalised voice assistant capable of recognising multiple users via speaker identification using 1D CNN and FFT-based voice signal processing, achieving 98% accuracy.
- Integrated speech recognition, intent handling, and real-time interaction through Flask APIs.

Tech Stack: TensorFlow, Keras, Python, PyAudio, Flask

## EDUCATION

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### Bachelors in Technology in Computer Science

2019 - 2023

Vellore Institute of Technology, Bhopal

CGPA: 8.54/10

## ACHIEVEMENTS

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- 1k+ reputation on Stack Overflow
- Ranked in the top 12 nationwide in Sony's Dream to Reality Contest in India.
- [Pro-Hacker](#) @ HackTheBox, best world rank: 552; [Wizard\[0xA\]](#) @ TryHackMe, best: top 1% worldwide