

# Deependu Jha

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## Education

BIT Mesra, Ranchi (India)

Nov 2020 - Aug 2022 (Dropped Out)

B.Tech in Electronics & Communication Engineering

Last CGPA: 8.2

## Skills

**Languages:** Python | C++ | Javascript | Typescript

**WebDev:** Next.js | TailwindCSS | Node JS | Express.js | FastAPI | Flask

**Database:** MongoDB | MySQL | Redis

**DevOps:** GitHub actions | Docker | Docker compose | AWS

**ML & DL libraries:** PyTorch | SciKit learn | Numpy | Pandas | Matplotlib | Tensorboard

**AWS cloud:** IAM | VPC | EC2 | ECR | ECS | S3 | Lambda | DynamoDB | Sagemaker | BedRock

**Course Work:** Data Structures & Algorithm | Operating System | DBMS | Computer Networks

## Experience (Entrepreneurial Journey)

Co-founder @Drift-DAO

Dec 2022 - Feb 2023

- An all in one app to navigate smoothly across DAOs you're part of.
- Managed to get Pune-DAO members to try the app and got net positive feedback.
- Partnered with two WEB3 startups: Truts, and Spheron.
- Pitched to 5+ VC & angel investors, including Polygon Village, CoinDCX ventures, Coinbase ex-CTO, Developer DAO, and more.

## Personal Projects

Image Captioning & Distributed training on AWS 

[Checkout Project](#)

- Model trained on dataset of size 9 GB+.
- Created pipeline for smooth flow of data from kaggle to S3 through EC2.
- Combined 'Vision transformer' architecture with 'caption decoder' to create Image caption generator.
- Distributed training of model on AWS sagemaker on 3 instances with 24 NVIDIA A100 GPUs for 200 epochs.
- More than 111 million parameters trained, and took almost 8 hours.
- Total training costed over \$1100.

English to German translator using transformer 

[Checkout Project](#)

- English to German translator transformer trained on Multi30k dataset.
- Next.js along with tailwindCSS for frontend, and FastAPI for backend.
- MongoDB is used for storing user data and translations.
- Both frontend & backend are dockerized and deployed on AWS EC2.
- GitHub actions are used for continuous integration and deployment.

Constitution GPT - A RAG application deployed on AWS ECS 

[Checkout Project](#)

- A RAG application that answers queries related to Indian Constitution.
- Qdrant has been used for vector-store, and 'sentence-transformer' for creating embeddings.
- Using RAG reduced response-delay by more than 300ms for 200 word queries.
- Next.js along with tailwindCSS for frontend, FastAPI for backend, and GitHub actions for CI/CD.
- Deployed on AWS ECS with autoscaling & load balancers to handle traffic efficiently.

## Achievements

- Prize Winner at EthIndia 2022 hackathon, biggest WEB3 hackathon till 2023 in world.
- 1st prize winner at BIT Mesra innovation challenge in June 2021.
- Qualified JEE-Advanced 2020, one of the toughest examinations of the world.