

Utkarsh Kumar Sahu

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EDUCATION

Indian Institute Of Technology (BHU)

- Bachelor of Technology; CGPA: 8.14

Varanasi, India

Nov 2020 - June 2024

SKILLS SUMMARY

- Hard Skills** DSA, DL, Transformers/LLM's, OpenCV, Time Series, MERN Stack, Docker/Kubernetes, Django/FastAPI
- Technical Proficiencies** C, C++, Python, SQL, JavaScript, Matlab, OS, DBMS, CN, OOPS, System Design-LLD.
- Tools** Jupyter Notebook, VS Code(IDE), Github, Tableau, MS Excel, MySQL, Canva, Figma, Postman, Minikube.
- Soft Skills** Leadership, Teamwork, Time Management, Flexibility, Coaching/Mentoring, Motivated and Work Ethic.

EXPERIENCE

Data Scientist at Publicis Sapient

May 2023 – July 2023

- Developed **clustering** and mathematical (**Pulp**) models for optimizing facility locations in warehouse management.
- Optimize the objective function, solve **inventory and route optimization** problems for the **delivery chain by 3.1%**
- Deployed code using Docker and **increased efficiency by 2.1%**, used service pods on an AWS Kubernetes cluster
- Exposure:** Operation research, Business study, Mathematical models (Pulp), Kubernetes, Streamlit. [Link](#)

Artificial Intelligence Trainer at Scale AI

Feb 2024 - May 2024

- Developing RLHF** (Reward Learning from Human Feedback) strategies to enhance the effectiveness of chatbots.
- Implementing quality control practices to ensure **accurate chatbot responses**, improving the user experience.
- Ensuring the **reliability of AI models** by maintaining high standards in task execution by promoting precision.
- Exposure:** Large Language Models (LLM), Prompt Engineering, Parallel Algorithms

Deep Learning Engineer at TMLC

Dec 2022 - Feb 2023

- Worked on detecting **YOLO models**, i.e. yolov5-v7-v8 models, **increased accuracy by 7.8%** using FPN networks.
- Detected birds & calculated the **interval**, created dashboards on streamlit, **improved inference speed by 80fps**.
- Worked with **100+ CCTV footage** and deployed model on an **AWS EC2** instance to calculate the metrics.
- Exposure:** Object-Detection-Segmentation, YOLO-v7/8, Tensorflow, AWS, Roboflow, Streamlit. [Link](#)

Machine Learning Engineer at Univ.AI

Oct 2021 - Dec 2021

- Worked on **scraping** using **Octoparse** and generating a phone sales dataset with a **MAPE score 0.029**.
- Implemented Statistical, LSTM, ARIMA and XGBoost model achieving an **accuracy rate of 97.31%**
- Worked with the events team and organise the **ML hackathon for 250+ students** and administered leaderboard.
- Exposure:** Time series, ARIMA, Web Scraping, XGBoost, Octoparse, Event Management. [Link](#)

PROJECTS

Memor.AI Ed-Tech Platform

Jan 2023 - March 2023

- Built an Ed-Tech platform for **active retention learning** using Flutter, Django, and Transformers. [Apl](#)
- Developed spaced repetition, BERT-based generator, summarizer, similarity, extracting QnA model as **features**.
- Deployed **Django** backend on **Heroku** to fetch API requests on our app, created a Deck of our solution. [Deck](#)
- Exposure:** BERT, OpenAI, Django, RestAPI, Flutter, Heroku, UI/UX, Figma, Product management [Demo](#).

Synthetic Serendipity - Enigmatic Anime VAE-GAN

Sept 2022 - Oct 2022

- Leveraged Variational Autoencoder and **GANS** to generate unique **anime-style** character faces.
- Utilized **PyTorch** to implement Deep Convolution GAN and trained on a diverse dataset of anime images.
- Resulted in character portraits with potential gaming and digital art applications and deployed using **FastAPI**.
- Exposure:** Variational Autoencoder (VAE), Generative Adversarial Network (GAN), FastAPI, Pytorch, Jinja. [Link](#)

HONORS AND ACHIEVEMENTS

- Auto Code Generator using GPT-3 Neo:** Demonstrated the working of Auto Code Generator using **GPT-3 Neo**, which generates code from snippets or commands. Built with the **transformer** model having **1.3 billion** parameters. [Link](#)
- Multiverse of Languages — Intro to Python:** Delivered a 2.5-hour live Python tutorial covering 30 key topics, hosted by Google Developer Students Club ([GDSC](#)). The video has over **3000+ views** on **YouTube**. [Link](#)
- Research Paper Implementation - Missing Data Sequence:** Designed a deep imputation model using a sequence-to-sequence architecture in Tensorflow to recover missing data sequences and implemented a **sliding window algorithm** for training samples. [Link](#)

POSITION OF RESPONSIBILITY

Technical Events Head, COPS(IG)

Varanasi, India

- Conducted various hackathons, workshops and events for freshers.

June 2022 - June 2023

Moderator, Cntrl Shift Intelligence

Varanasi, India

- Organised and served as a mentor for a dynamic 3-day hackathon hosted on Kaggle.

April 2022

EXTRA-CURRICULAR ACTIVITIES

- Solved **400+** questions on the Interview Bit platform and **1500+** questions on various coding platforms. [Profile](#)
- Verbal Mention** in the All India Political Party Meet (**AIPPM**) committee at IIT BHU MUN. [Link](#)