Yuvraj Pratiksh Raghuvanshi

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ACADEMIC QUALIFICATIONS

Degree/Certificate	Institute	CPI/%	Year
M.Tech. 🛕	Indian Institute of Technology, Kanpur	8.57/10	2024 – Present
B.Tech. 📤	ABES Institute of Technology, Ghaziabad	7.59/10	2018 – 2022
CBSE(XII) 📤	J. P. Public School, Baraut (Private Candidate)	70.6%	2018
CBSE(X) 📤	J. P. Public School, Baraut	8.0/10	2015

WORK EXPERIENCE

• Silent Partner / Shareholder 🌢 — Nyay Setuu AI Pvt. Ltd., Kanpur

 $(Jun\ 25 - Sep\ 25)$

- Early contributor to a **legal-tech platform** connecting lawyers and clients via chat, calls, and appointments.
- Architected **infrastructure** with optimized schemas, scalable APIs, and modular UI.
- Built real-time systems using Firebase (messaging) and Agora SDK (video/voice).
- Prototyped AI tools for legal summarization and case guidance; now a silent partner.
- Keywords: Firebase, Agora SDK, WebRTC, PostgreSQL, Project Management, Web Application, AI for Law
- Software Engineer 📤 Sixdis Tech. Pvt. Ltd. (🗹 Oolka.in), Bangalore

(Dec 23 - May 24)

- Worked on the credit-analysis platform Oolka, after Sixdis acquired its IP from Rupymart.
- Ensured smooth **product transition** by maintaining API versions, adding features, and supporting deployments.
- Keywords: API Development, Python, FastAPI, Django, FinTech, Product Transition, System Design
- Software Engineer 📤 Rupymart Tech. Pvt. Ltd., Kolkata

(Apr 23 - Nov 23)

- Built infrastructure: RESTful APIs, PostgreSQL schemas, CI/CD pipelines, AWS + Docker deployments.
- Automated integration of credit bureau data to generate and analyze credit reports.
- Extended the bank statement parser Inkredo with Django, pdfplumber, regex, and ML models.
- Migrated entire third-party JavaScript codebase to Python3 for scalability and in-house ownership.
- Keywords: Python, FastAPI, PostgreSQL, AWS, Docker, ML Integration, System Migration
- Software Engineer 📤 Vectoscalar Tech. Pvt. Ltd., Noida

(Nov 21 - Oct 22)

- Built scalable microservices using Python Flask for e-commerce, ensuring 99.9% uptime on AWS.
- Cut infrastructure costs with AWS Lambda and optimized deployments via Docker + CI/CD pipelines.
- **Designed MongoDB schemas** for reliable, high-volume transactions with seamless scalability.
- Keywords: Python Flask, Microservices, AWS Lambda, CI/CD, Docker, MongoDB, Cloud Infrastructure

RESEARCH WORK

DoodleVision

Poetry Generation in Hindi Language

(May 25 – Present)

- Mentor: Prof. Arnab Bhattacharya, IIT Kanpur
 - Curating & preprocessed large-scale datasets of Hindi poems, quotes, dohas, and folk literature for training.
 - Fine-tuning **IndicBERT** and related transformer models for poet classification and thematic categorization.
 - Future work on Hindi LLMs using both encoder-only and encoder-decoder setups for poem generation.
 - Keywords: IndicBERT, LLM Fine-tuning, Text Generation, NLP, Poetry Generation

(Feb 25 – Present)

- Mentor: Prof. Priyanka Bagade, IIT Kanpur
 - Built novel hybrid model fusing image+stroke data; achieved 89.41% accuracy, +5% over benchmark <a>IIII
 - Paper under preparation for WACV 2026, highlighting novelty in architecture and efficient multimodal fusion.
 - Designed disk-streaming pipeline for memory-constrained environments, training with 25M+ examples.
 - Deploying optimized inference pipeline to edge devices (Raspberry Pi) for real-time applications.
 - Keywords: Deep Learning, Multimodal Fusion, Disk-Streaming, Edge Deployment, CNN, LSTM

• EarlAz: Early Detection of Alzheimer's using Mobile Game and ML 📤

(Jan 22 - Jun 22)

Mentor: Prof. Veena Bharti, ABESIT

- Designed a mobile game to collect cognitive-behavioral data for early-stage Alzheimer's detection.
- Implemented SVM and Decision Tree classifiers to predict cognitive decline from gameplay features.
- Keywords: Unity3D, SVM, Decision Tree, Cognitive Games, Keras, GPU

PROJECTS

• WhatsApp Key/Database Extractor (Self Project, Open Source)

(Nov 20 - Aug 23)

- Engineered a forensic tool to extract WhatsApp keys & databases from Android devices via Python + ADB.
- Enabled migration of WhatsApp chats to Signal, collaborating with Swiss developer on Signal-Android.
- Demonstrated capability to remotely extract files without target user intervention.

- Open-sourced with strong adoption: 520+ stars, 70+ forks, 500K+ hits on GitHub.
- Keywords: Python, Android, Digital Forensics, Security Research, Android Debug Bridge, Collaboration
- Blockchain-based Ticketing System (Course Project)

 $(Mar\ 25 - Apr\ 25)$

Mentor: Prof. Angshuman Karmakar, IIT Kanpur

- Developed a blockchain ticketing system with web UI for secure booking, cancellation, and rescheduling.
- Implemented smart contracts for payments, verifiable records, and double-booking & overbooking prevention.
- Keywords: Hyperledger Fabric, Smart Contracts, Blockchain, Node.js, Kubernetes, Docker
- **Detection of Deepfake** (Course Project)

(Sep 24 - Nov 24)

Mentor: Prof. Arnab Bhattacharya, IIT Kanpur

- Built a web platform to let users review videos as authentic/deepfake; aggregated responses for analysis.
- Studied patterns, biases, and temporal trends in human judgment of deepfakes.
- Keywords: Deepfake Detection, User Analytics, Thematic Analysis, TF-IDF, Temporal Analysis
- AmazoLens (Course Project)

 $(Feb\ 25 - Apr\ 25)$

Mentor: Prof. Soumya Dutta, IIT Kanpur

- Designed an interactive dashboard for Amazons e-commerce data, enabling sales trend analysis, customer segmentation, and product recommendation using advanced visualization and machine learning.
- Applied market basket analysis, topic mining, sentiment analysis, and forecasting (Prophet).
- Keywords: Data Visualization, Market Basket Analysis, NLP, Sentiment Analysis, Recommendation, D3.js

TECHNICAL SKILLS

• Languages: Python, C++, JavaScript, C#

• Web: Node.js, React, Express.js, REST APIs

• Databases: MySQL, PostgreSQL, MongoDB

• Frameworks: FastAPI, Django, NumPy, Pandas, Tensor-

Flow, PyTorch

- DevOps/Cloud: Git, Docker, Kubernetes, AWS, CI/CD
- Others: Hyperledger Fabric, Bash, YAML, LATEX

POSITIONS OF RESPONSIBILITY

• Teaching Assistant for CS787 Generative Artificial Intelligence, CSE, IIT Kanpur.

(Jul 25 – Present)

• Teaching Assistant for ESC111/2, CSE Department, IIT Kanpur.

(Jan 25 - May 25)

• Teaching Assistant for ELC courses, CSE Department, IIT Kanpur.

(July 24 –Nov 24)

SCHOLASTIC ACHIEVEMENTS

- A Ranked 157th/123,967 in *GATE 24 (CS)*.
- A Ranked **724th/39,210** in *GATE 24 (DS & AI)*.
- Earned 200/100/50-day streaks on *LeetCode* , plus Monthly Medals (Oct 24 Jan 25).
- A Graduated with 1st Division with Honours, ABES Institute of Technology.

RELEVANT COURSES

Data Structures & Algorithms	Operating Systems	Computer Networks*
Database Management Systems	Compiler Design	Software Engineering
Discrete Mathematics	Theory of Computation	Cryptography & Network Security
Intro to Machine Learning (CS771)	Data Mining (CS685)*	Deep Learning for CV (CS776)
Big Data Visual Analytics (CS661)	Cloud Computing	Blockchain & Applications (CS731)*
Computational Geometry (CS663)	Data Analytics	Discrete Structures & Logic

^{*} Secured grade A

(Feb 23 – Apr 2.