

+91-8707446780adarshukla3005@gmail.com linkedin.com/in/adarsh-shukla30 Uttarakhand,India

EDUCATION

Degree/Certificate	${\bf Institute/Board}$	Year
B.Tech.	Indian Institute of Technology Roorkee	2022 - 2026
Intermediate	BBS International School Prayagraj	2020 - 2021

EXPERIENCE

• CCSB Labs

March 2024 - May 2024

IIT Roorkee

Machine Learning Research Intern

- Designed TensorFlow/Keras model for 2D and 3D cell segmentation in microscopy images, achieving 91% precision
- Automated preprocessing of 12,000+ 3D images, enhancing signal-to-noise ratio by 28% and reducing processing time by 32%.

• DEFSYS PVT. LTD.

May. 2024 - Jul. 2024

Gurgaon(Remote), India

 $Software\ Developer\ Intern$

- Built an **AI assistant** for **demo scheduling**, **interview screening**, **and payment follow-ups** using Flask, Streamlit, and Google Gemini AI, supporting voice and text interactions in Hinglish.
- Integrated Google Calendar API for automated scheduling and Gmail SMTP for payment follow-ups, ensuring seamless communication. Developed a real-time AI interviewer that generates dynamic questions, conducts sequential questioning, and evaluates responses.
- Optimized workflows using LLM-based agent prompting, enhancing response accuracy and context awareness.

• Awesome Advertising

August 2024 - September 2024 Delhi(Remote), IIT Roorkee

Financial Analyst Intern

- Built a financial report generator using Financial Modelling Prep API, and stored it in CSV for further analysis.
- Developed RAG architecture with Langchain, Falcon 7B LLM Architecture, and Vector DB for data handling.
- Generated a financial report for MSFT with FY2024 revenue of **0.245 trillion**.

PROJECTS

• RAG with Optimization

April 2024-May 2024

DSG (Data Science Group), IIT Roorkee)

Github

- Built an AI chatbot to query multiple PDFs using Google Gemini Pro, FAISS, and LangChain.
- Integrated **speech-to-text** and **Streamlit UI** for real-time voice and text-based queries.
- Optimized text retrieval with Google AI embeddings, text splitting, and PyPDF2.

• Stocks Sentiment Analysis

May 2024-Jun 2024

Finance Club, IIT Roorkee

Githul

- Developed a machine learning model to forecast stock movements using sentiment analysis of financial news headlines, achieving a 65% accuracy rate and enhancing trading strategy profitability by 20% in simulated environments.
- Evaluated model with accuracy, precision, recall, F1-score, ROC curves, and AUC. Simulated trading strategy with a \$100,000 portfolio. Web Scraped 1000+ news headlines and used NLP for feature extraction.

• WebBot - Custom Chatbot for Course Recommendation

 $May\ 2024\text{-}June\ 2024$

IIT Roorkee

Github

- Built a **Flask-based chatbot** using LangChain to extract, store, and retrieve course data from Brainlox.
- Used **BeautifulSoup** for web scraping, FAISS for vector storage, and MiniLM-L6-v2 embeddings for retrieval.
- $\ \, Integrated \ \, Facebook-BART \ \, for \ \, response \ \, generation \ \, and \ \, deployed \ \, a \ \, \textbf{RESTful API} \ \, with \ \, a \ \, HTML/JS \ \, frontend.$

ACHIEVEMENTS

- Secured AIR 8326 in JEE Advanced 2022 among 1.56 lakhs students appeared.
- Achieved a highest rating of 1234 (Pupil) at Codeforces, the top platform for competitive programmers.
- Certificate of Merit for being among top 0.1% candidates in Mathematics in CBSE Secondary School Certificate Examination (2019).

PROFILE LINKS

• Github • Portfolio • Codeforces

 \bullet Leetcode

• Linkedin

TECHNICAL SKILLS

- Programming Languages: C/C++, Python, SQL, MATLAB.
- Software Packages: TensorFlow, Numpy, Pandas, Seaborn, Google Cloud, MS Office, LLM, RAG, NLP, Git, Streamlit, MongoDB, Flask, FAISS, HTML, CSS, Javascript
- Relevant Coursework: Data Structures and Algorithm, Object Oriented Design, Machine Learing Specialization, Deep Learning
- Languages Known: English (SRW), Hindi (SRW)

EXTRA CURRICULARS

Vice Chairperson, CIG IIT Roorkee: Facilitated collaborations, organized industry-academia interactions. Organized events like Uttarakhand Udyog Mahotsav (Startup Expo), Uttarakhand Plastic Summit, and National Tech Day. Placement Manager, PIC IIT Roorkee: Coordinated with 150+ companies for campus recruitment, benefiting 1500+ students, and managed 50+ end-to-end recruitment drives. Acted as a liaison between students and the institute.