Ujjawal Kumar

📞 +91-6200542180 🔀 ujjawalsah9801@gmail.com 🛭 in ujjawal-kumar-9b7719228 🌎 UjjawalSah 🔇 <u>Portfolio</u>

EDUCATION

Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

2021 - 2025

Bachelor of Technology in Computer Science and Engineering - CGPA: 8.9

Chennai, India

WORK EXPERIENCE

Freelance Subject Matter Expert, Chegg

Remote, 08/2023 - Present

- Provided precise solutions in data science, Python, and backend development.
- Explained complex concepts efficiently, ensuring high student ratings.
- Maintained accuracy and adherence to deadlines in technical problem-solving.

PERSONAL PROJECTS

Email Scheduling System (Hackathon Project - IIT(BHU) Varanasi ☑ Flask, React.js, MongoDB, SMTP/SendGrid, APScheduler, Gemma [Code] [Live]

- Leveraged APScheduler and Gemma for automated email content generation, reducing manual drafting time by 40% and enabling cancellation of scheduled tasks up to 15 minutes prior to execution, with support for over 10 international time zones.
- Implemented 3 innovative features absent in Gmail—including customizable scheduling and flexible cancellation mechanisms—resulting in a 25% boost in operational efficiency, as developed during the IIT(BHU) initiative.

Pulmonary Fibrosis Severity Prediction – Guided by Anil Kumar (IBM)

[Code] [Live]

- Spearheaded a machine learning initiative leveraging Python, TensorFlow, and Keras to develop CNN models for predicting pulmonary fibrosis severity, focusing on optimizing FVC decline prognosis.
- Processed and analyzed a dataset of 10,000+ CT scan images, enhancing model accuracy, and utilized GPU acceleration on Google Colab and Kaggle, achieving a 40% reduction in training time.

AI-Driven Social Media Comment Classifier - Python, NLP, Logistic Regression

[Code] [Live]

- Developed a web-based application to analyze and classify social media comments, focusing on Twitter data.
- Utilized natural language processing (NLP) and Logistic Regression to classify comments based on sentiment, relevance, and harmfulness.
- Optimized AI models to achieve a high classification accuracy of 97%.
- Designed interactive visualizations to display the top 10 classified comments on a results page.

TECHNICAL SKILLS

Languages: Python, C, Java

Backend Technologies: Flask, Flask REST APIs, Java Servlet

Data Science Tools: Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, TensorFlow, Keras Machine Learning Techniques: Regression, Classification, Neural Networks, Clustering

Data Analysis & Visualization: Google Colab, Jupyter Notebooks, Seaborn

Databases: SQL (MySQL), NoSQL (Firebase)

Version Control: Git, GitHub

Soft Skills: Problem-solving, Analytical Thinking, Adaptability, Collaboration, Communication

Certifications and Achievements

- * Runner-up Hackathon, IIT (BHU) Varanasi. Secured 2nd place in a hackathon, showcasing innovative problem-solving skills and technical expertise.
- * 3rd Place AlgoZen 3.0, IIT (BHU) Varanasi. Achieved 3rd position in AlgoZen 3.0, a competitive coding challenge that demonstrated algorithmic proficiency and strategic thinking.
- * PwC Launchpad Program. Selected for hands-on training in Java, RDBMS, DevOps, and cybersecurity fundamentals under industry experts.
- * AWS ML Foundations. Completed AWS Academy training in Machine Learning, covering cloud-based AI solutions.
- * Wipro Full Stack Java. Certified in Java, Spring Boot, and Web Development, enhancing backend expertise.
- * Coding Competitions. Secured top positions in Codeathons & Ideathons, excelling in problem-solving and innovation.