ADITYA SINGH

(+91) 7379356275 | csaditya038@gmail.com | velcorum.vercel.app

in adityasingh42 | 🞧 TheGuyCheese | 🚱 Aditya Singh | 🎔 velcorum

EDUCATION

Amity University

Sep 2021 - Jun 2025

B.Tech (Computer Science and Engineering)

o CGPA: 8.64

Lucknow, India

EXPERIENCE

• Outlier AI Feb 2025 - Present

AI Trainer Remote

- Trained generative AI models by evaluating and ranking AI-generated responses for coherence and relevance.
- Composed diverse prompts and short stories to enhance AI language generation capabilities.
- \circ Assessed factual accuracy of AI-produced content to ensure high-quality outputs.

• Oriental InfraTrust

Jul 2024 - Sep 2024

Computer Vision Intern Remote

- \circ Engineered a Computer Vision Model, improving image detection efficiency by 25 %
- Optimized image processing, improving clarity and accuracy by 20 %.
- Enhanced vehicle and license plate recognition with advanced image recognition algorithms.
- Streamlined image capture and processing, reducing workflow inefficiencies by 10 %.

• United Mentors Pvt. Ltd.

May 2024 - July 2024

Data Science Intern Remote

- Developed interactive Power BI dashboards, improving data visualization and stakeholder insights.
- Employed Python (Pandas, NumPy) for data analysis, enhancing data processing efficiency.
- Utilized SQL to extract and manage data, enabling better decision-making through structured queries.
- Conducted trend analysis on complex datasets, identifying key business insights.

PROJECTS

• Speech Transcription and Translation

Tools: Python, Google Colaboratory, Gradio, Hugging Face, Microsoft Visual Studio Code, Git

[\bigotal)]

- Led a team to develop and optimize a transformer model for speech transcription and translation, improving efficiency.
- Integrated Whisper-large-v3 via Hugging Face, enabling ASR and translation in 100+ languages.
- Built a real-time transcription pipeline, reducing latency by 25% and improving WER by 8%.
- Enhanced model performance by fine-tuning on domain-specific datasets, improving transcription accuracy.

Budget Wise: A Budget Tracking App

Tools: Next.js 14, Clerk, Tailwind CSS, Typescript, PostgreSQL, Prisma, Neon

[🗘]

- Developed a modern dashboard app with Next.js 14, featuring secure authentication and real-time data visualization.
- Integrated financial management tools including real-time budget tracking, multi-currency support, and detailed transaction history.
- Engineered interactive charts for spending analysis, budget vs. actual comparisons, and category-wise breakdowns.
- Optimized performance with responsive design, cross-device sync, and enterprise-grade security measures.

Github Profile Finder

Tools: Next.js, Github API, Tailwind CSS, React, TypeScript, Vercel



- Developed a system for finding profiles on github
- Implemented Next.js to create a responsive and dynamic user interface.
- Designed a search component for efficient retrieval of GitHub profile.
- Integrated RESTful APIs to fetch and display real-time GitHub user data.

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION

- Aditya Singh, et al. (2025). AI-Driven Dynamic Difficulty Adjustment in Educational Games: Enhancing **Engagement and Learning Outcomes** . Manuscript submitted for publication in *Education and Information* Technologies.
- [J.1] Shalini Agarwal, Suyash Pandey, Vishal Sarup Mathur, Aditya Singh, et al. (2025). Cryptanalysis along with intention decoding in the encrypted corpus of text using attention transformer mechanism. Recent Advances in Sciences, Engineering, Information Technology & Management, Vol.1, Issue 1, page 8. DOI: 10.1201/9781003598152

SKILLS

- Programming Languages: C, C++, Python, Javascript, Typescript
- Web Technologies: HTML5, CSS3, React, Node.is, Next.is
- Database Systems: MySQL, PostgreSQL, MongoDB
- Data Science & Machine Learning: NumPy, Pandas, scikit-learn, TensorFlow, PyTorch, Matplotlib, Seaborn, **PowerBI**
- Cloud Technologies: AWS, Azure, Google Cloud Platform
- DevOps & Version Control: Git, Docker
- Specialized Area: Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Reinforcement Learning
- Other Tools & Technologies: Linux, Windows, VS Code, Visual Studio
- Research Skills: Data Analysis, Experimental Design, Literature Review, Statistical Analysis, Machine Learning, Technical Writing

HONORS AND AWARDS

 Winner September 2024

AI-Fusion Hackathon by Pickl.AI

o Designed and developed advanced models and interactive dashboards using PowerBI for predictive loan analysis, enhancing financial decision-making for a bank.

Winner in Local Chatbot Category

May 2024

[#]

Hack to Crack 1.0 by Tensorflow User Group

Developed a language translation and transcription application using Whisper and Gradio.

• Winner Bio-Code@Thon

August 2023

• Developed predictive models for analyzing multiple diseases.

LEADERSHIP EXPERIENCE

• Team Leader, AI-Fusion Hackathon

September 2024

Transorg Analytics

Praedictio Club

- Led a team that won the AI-Fusion Hackathon, a national-level competition with 800+ participants.
- Developed an innovative AI solution that outperformed competing teams in technical accuracy and impact.
- Coordinated team efforts, managed time-sensitive tasks, and ensured seamless collaboration.

• Project Lead, Environmental Awareness Initiative

September 2023

- SAP
- Led a team of 8 to promote environmental awareness and tree planting.
- Organized campaigns and engaged the local community.
- Planted more than 20 trees to support sustainability.



• Volunteer August 2023

HVCO

- Visited remote village schools to teach children basic computer and technology skills.
- Engaged with students through interactive learning sessions.
- Advocated for better infrastructure by writing to local authorities for improved lighting and updated computers in school labs.

• Member & Volunteer, ECO Club

May 2023

Amity University

- Organized events, including an Earth Day quiz competition.
- Designed the cover page for a conference proceedings book on sustainable development.
- Supported various initiatives promoting environmental awareness on campus.

CERTIFICATIONS

Open EDG: PCAP: Programming Essentials in Python	May 2024
Cisco: Introduction to Cybersecurity	May 2024
Cisco: Cybersecurity Essentials	May 2024
Cisco: CCNAv7: Enterprise Networking, Security, and Automation	June 2024
Cisco: CCNAv7: Switching, Routing, and Wireless Essentials	June 2024
Cisco: CCNAv7: Introduction to Networks	December 2023
IBM: Data Science Orientation	October 2023
• IBM: Fundamentals of C++	June 2022

ADDITIONAL INFORMATION

Languages: English (Proficient), Hindi (Mother Tongue), French (Beginner) **Interests:** Artificial Intelligence, Machine Learning, Book Reading, Football