Aditya Vikram Singh

adityavsingh95@gmail.com +91 9336782378 github.com/adityavikramsingh07
linkedin.com/in/aditya-vikram-singh-831659252/

Education

Vellore Institute of Technology, Bhopal *Oct 2022 – July 2026*
Bachelor of Science in Computer Science, CGPA - 8.45

St.Fidelis College *April 2018 – May 2021*
Class XII: 81%, Class X: 88% – Lucknow, Uttar Pradesh

Relevant Coursework: I have studied Object-Oriented Programming, Data Structures and Algorithms, DBMS, Operating Systems, Computer Networks, Software Testing, UI/UX Design, and Cloud Computing (Azure, AWS, GCP). My learning also includes Feature Engineering, Model Optimization, and Generative AI.

Research Interests: : My interests include full-stack development, cloud-native applications, healthcare technology, and secure enterprise systems. I'm also focused on improving communication and logical reasoning in tech-driven environments.

Skills

Languages: TypeScript, JavaScript, Python, Java, C/C++, SQL, HTML5, CSS3.

Frameworks & Libraries:: React.js, Node.js, Spring Boot, Angular, TensorFlow, Bootstrap, jQuery, Express.js.

Cloud & DevOps: Microsoft Azure, AWS (Lambda, RDS, S3), GCP, Git, GitHub Actions, CI/CD Pipelines.

Tools & Platforms: Visual Studio Code, IntelliJ IDEA, Postman, Figma, Azure App Services, Cloud Run, Cloud SQL.

Development Expertise:REST API Development, Full Stack Web Development, Secure Role-based Authentication, Enterprise Software Design, Healthcare Domain Knowledge (Claims & Appointment Systems).

Soft Skills: Troubleshooting , Advanced English in Communication, Teamwork.

Projects

Billing Dashboard Healthcare Platform — *TypeScript, JavaScript, MySQL, AWS* *Aug 2023 – Oct 2024*

- Designed a scalable **billing dashboard** using **TypeScript and Express.js**, handling 10K+ daily healthcare transactions.
- Deployed backend microservices to **AWS Lambda** and used **S3 for invoice management**.
- Achieved **50% faster invoice generation** via asynchronous API and load balancing.

Hate Speech Detection — *LSTM,BERT,CNN* *Feb 2024 – Apr 2024*

- Developed a system using **BERT and LSTM** architectures, achieving 78% accuracy on real-world social media data.
- Engineered data pipelines for text preprocessing, **tokenization**, class balancing **(SMOTE)**, extraction with TF-IDF and embeddings.
- Optimized model performance through **hyperparameter tuning**,data augmentation, and ensemble learning techniques.
- Evaluated and validated models with **precision (76%), recall (72%), and F1-score (74%)**, preparing for cloud deployment.

Disease Prediction from Symptoms — *Python, Scikit-learn, Pandas, Jupyter,* *May 2024 – July 2024*

- Implemented disease prediction models **Naive Bayes**, **Decision Tree**, **Random Forest**, and **Gradient Boosting**.
- Processed medical symptom datasets with **130+ features** using Python, Pandas, and Scikit-learn.
- Developed **inference scripts** and interactive Jupyter notebooks for model evaluation and prediction.

Achievements

- **Smart India Hackathon 2023:** Qualified after excelling through three internal rounds among 500+ participants.
- **Amdocs Graduate Gen AI Hackathon 2024:** Qualified through the Programming rounds upto the Prototype Submission Rounds among a national pool of participants for innovative GenAI solution.
- **IBM Gen AI Using IBM Watsonx:**Achieved an overall score of **81.11%** in this industry-recognized certification.

Extracurricular Activities

- **National Service Scheme (NSS):** Led a team of 20 volunteers to plant 10,000+ trees.