Jaspreet Singh Nahal

Noida, India
jaspreetnahal100@gmail.com
+91-9999604054
linkedin.com/in/jaspreet-nahal – github.com/merciless-admiral-3083 – https://tinyurl.com/jaspreetnahal

Summary

Results-driven Computer Science Engineering student specializing in Artificial Intelligence and Machine Learning with proven expertise in full-stack development, cloud computing, and software engineering. Experienced in developing scalable AI solutions, NLP-based chatbots, and automated trading platforms using Python, React.js, and modern web technologies.Built and deployed a QR Code Generator web app. Multiple hackathon participation with hands-on experience in agile development, API design, and performance optimization. Seeking software engineering and AI engineering roles to leverage technical skills and innovative problem-solving abilities.

Technical Skills

Programming Languages: Java, Python, C++, C, JavaScript
Web Technologies: HTML5, CSS3, React.js, Node.js, Flask, FastAPI, Express.js, Axios, JWT, REST APIs
Databases: SQL, PostgreSQL, MongoDB, Redis, MySQL
AI/ML: TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, OpenCV
DevOps & Tools: Git, GitHub, CI/CD, VS Code
Core Competencies: Algorithms, Data Structures, Object-Oriented Programming (OOP), API Integration

Experience

AI Chatbot Developer August 2024 – September 2024
Project Experience/Freelance *Noida, India*

- Developed an AI-powered chatbot with React.js frontend and Flask-based backend using Python
- Integrated NLP capabilities to personalize conversations and improve response relevance
- Embedded real-time API calls to deliver dynamic, data-driven answers and simulate intelligent troubleshooting
- Achieved a 25% improvement in user interaction time by optimizing conversation flow and interface design

Algorithmic Trading Developer November 2024 – December 2024
Project Experience/Freelance *Noida, India*

- Enforced an automated stock trading system implementing the SMA (Simple Moving Average) crossover strategy
- Designed an intuitive dashboard to monitor trade signals and visual market trends, enabling better user decision-making
- Enhanced backend performance using Flask and PostgreSQL, resulting in a 30% reduction in trade latency
- Scaled the system to handle increased trading volume with optimized data handling and async processes

Projects

Resumè Skill Extractor | *Python, REST-API Development, NLP, PDF Parsing, React* June 2025

- Developed a web application that extracts and categorizes skills from PDF resumes using advanced text analysis and document processing methods.
- Built a RESTful backend to process uploaded resumes and identify both technical and soft skills from a curated skills database.
- Designed a React frontend with drag-and-drop PDF upload and dynamic display of categorized skills.
- Enabled recruiters and job seekers to efficiently analyze resumes and streamline candidate screening with structured skill insights.

AI Restaurant Appointment Scheduling Chatbot | *Python, Flask, MongoDB, AI Models* February 2025

- Executed an intelligent chatbot that automates restaurant booking using NLP-based conversation flow
- Integrated MongoDB for dynamic data handling and enhanced booking reliability
- Reduced manual scheduling efforts by 60% with fully automated appointment logic
- Delivered real-time booking confirmations and status updates via chat interface

SMA Crossover Stock Trading System | *Python, Flask, PostgreSQL, Data Visualization* December 2024

- Applied an automated stock trading platform using SMA crossover strategy to identify profitable trade signals
- Enabled real-time stock data analysis via a custom data streaming pipeline with Flask and PostgreSQL
- Designed interactive dashboards to visualize trends and assist in decision-making
- Boosted trading execution speed by 30% through backend optimizations and algorithm refinement

AI Document Reader and Invoice Matching System | *Python, Flask, AI Models* October 2024

- Constructed an AI-powered tool to automatically read, classify, and match invoices using text similarity and extraction techniques
- Automated recurring invoice workflows, cutting manual data entry by 50%
- Reduced error margin by 20% through enhanced entity recognition and validation logic
- Integrated Flask APIs for flexible input handling and process automation

AI Chatbot | *React.js, Python, Flask, RESTful API* September 2024

- Implemented a real-time AI chatbot using React.js for the frontend and Flask APIs for backend logic
- Engineered a scalable chatbot using NLP models with RESTful APIs and real-time data handling, enhancing user engagement
- Improved API performance and reduced response latency by optimizing request handling
- Achieved 30% user retention during peak traffic by maintaining seamless response quality

Education

Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh

Bachelor of Technology in Computer Science Engineering (Artificial Intelligence) *Expected June 2027*

CGPA: 8.2/10

Certifications

Google: Prompt Design in Vertex AI, Responsible AI: Applying AI Principles with Google Cloud
IBM: Accelerating Deep Learning with GPUs
GUVI: GUVI Hackathon - GUVI Geek Networks, IITM Research Park

Hackathons

Samsung Solve for Tomorrow – Samsung July 2025

- Built an AI-based Sign Language to English Translator using computer vision and deep learning to detect hand gestures and translate them into English

NationBuilding Hackathon – Unstop April 2025

- Architected an AI-based Restaurant Manager chatbot to automate bookings, staff queries, and feedback loops using Flask and MongoDB

Google Solutions Challenge – Google March 2025

- Collaborated on a real-world solution addressing local issues using Google technologies. Focused on scalable architecture and user-centric design

GUVI Hackathon – IITM Research Park February 2025

- Implemented an NLP-based Resume Skill Extractor to identify key candidate strengths from resumes for recruiters