Jayesh Bansal

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in LinkedIn ⭘ GitHub ⟨/⟩ LeetCode ⓗ HackerRank

Education

Indian Institute of Technology Madras, Madras, India Jan 2024 – Dec 2027
Bachelor of Science in Data Science and Applications (Online) *(Transcript)* CGPA: 8.75

SR University, Telangana, India Oct 2022 – May 2026
Bachelor of Technology in Computer Science *(Transcript)* CGPA: 9.5

Narayana Junior College, Telangana, India May 2019 – May 2021
MPC Intermediate *(Transcript)* Percentage: 81.4%

Pallavi Model School, Telangana, India May 2013 – May 2019
Degree in Matriculation *(Transcript)* Percentage: 83.2%

Projects

FastAPI Automation Tool - Python, FastAPI, OpenAI GPT (GitHub) **Feb 2025 - Feb 2025**

- Devised an AI-powered automation system using FastAPI, automating 80% of tasks and cutting execution time from 10 minutes to 5 seconds per task and integrated OpenAI GPT for natural language task classification, enhancing AI-driven automation in a production environment.
- Constructed modular API endpoints for log analysis, structured data processing, and AI-driven email parsing, improving efficiency by 60% and strengthened security by restricting access to specific directories, blocking 95% of unauthorized modification attempts.

Web Data Extraction & Processing Tool - Python, Web Scraping, File Parsing (Github) **Dec 2024 - Jan 2025**

- Designed an automated data pipeline using Python and cloud-based services, reducing manual data entry by 15 hours per week and allowing data analysts to focus on strategic analysis and built a resilient web scraping engine with adaptive request headers, increasing scraping success rate from 70% to 95%.
- Created an efficient file parsing system to retrieve structured data, improving processing speed by 40%.and optimized asynchronous requests and randomized delays, enhancing scraper performance while preventing IP bans.
- Applied transformation techniques to clean and normalize 50,000+ extracted product attributes monthly and refined data storage by optimizing structured logging, reducing log retrieval time by 35% for datasets exceeding 100GB and added robust error-handling techniques to maintain scraper reliability.

Multi-Format File Scanner - Python, Regex, OpenPyXL, PyPDF (GitHub) **Dec 2024 - Jan 2025**

- Developed a Python-based file scanner to search for keywords across multiple document formats, scanning 5,000+ files in under 10 minutes and applied regular expressions (Regex) to efficiently locate and highlight search terms within large documents.
- Engineered a multi-threaded file scanning approach to boost search speed by 30% and incorporated OpenPyXL and PyPDF for seamless spreadsheet and PDF content extraction.
- Built a CLI-based progress tracker, reducing processing time by 30% for scanning 10,000+ files per batch and enhanced error handling and performance optimization for large-scale file processing.

Internships

Google AI-ML Virtual Internship (Certificate) **July 2024 – September 2024**

- Engineered an advanced image classification feature within Android Studio, Boosted image classification accuracy from 75% to 92%, improving search relevance for 5,000+ monthly users.; integrated machine learning algorithms that upgraded user experience for over 5,000 app users monthly.

Skills

- **Soft Skills**: Leadership, Teamwork, Logical Reasoning, Communication
- **Programming:** C, Python, Java, C++, Ruby
- **Web**: HTML, CSS, JavaScript, FastAPI, REST APIs
- **Databases**: SQL, PLSQL, SQLite
- **AI & Machine Learning**: OpenAI GPT, Sentence Transformers, Embeddings, AI-based Text Processing
- **Automation & Scripting**: Task Automation, Web Scraping, Shell Scripting, API Integration
- **Data Processing**: JSON Parsing, Log Analysis, Markdown Indexing, Email Extraction
- **System & Security**: Access Control, File Handling, CLI Tools, Secure API Development
- **Tools**: VS Code, Brackets, Eclipse, Notepad++, Dev C++, Python, Thonny, Uvicorn, Postman
- **Source and Version Control**: Git, GitHub
- **Coursework**: Data Structures and Algorithms, Operating System, Computer Network, Database Management System, Natural Language Processing

Achievements and Certifications

Achievements

- Smart Interviews - Smart Coder, achieved Bronze Certification with a Global Rank of 16646/40531. (Certificate)
- Executed a comprehensive advertising campaign for the AD-War competition, leveraging digital platforms which resulted in over 5,000 views and 200+ interactions, establishing a strong presence among peers. (Certificate)
- Secured a position among the top-ranked participants at the SIH 2024 Internal Hackathon; focused on innovative coding solutions that fostered teamwork and enhanced collaborative skills within a competitive environment. (Certificate)
- Outstanding academic performance in the IV and V semester of my B.Tech in Computer Science and Engineering. Ranked in the top 10% of the class of 2022-26 (Certificate)

Certifications

- **Theory of Computation** (Verify) October 2024
- **Software Models Using UML** (Verify) March 2024
- **Machine Learning, Deep Learning using Tensorflow** (Verify) March 2024
- **Microsoft Azure Fundamentals** (Verify) March 2024
- **Data Structures** (Verify) October 2023
- **Python** (Verify) October 2023