

# Jayesh Bansal

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## Education

**Indian Institute of Technology Madras, Madras, India**

*Bachelor of Science in Data Science and Applications (Online)*

**Jan 2024 – Dec 2027**

*(Transcript) CGPA: 8.75*

**SR University, Telangana, India**

*Bachelor of Technology in Computer Science*

**Oct 2022 – May 2026**

*(Transcript) CGPA: 9.5*

## 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, Embeddings, AI-based Text Processing
- **Tools:** VS Code, Brackets, Eclipse, Notepad++, Dev C++, Python, Thonny, Uvicorn, Postman
- **Source and Version Control:** Git, GitHub
- **Coursework:** Data Structures and Algorithms (DSA), Operating System, Computer Network, Database Management System (DBMS), Natural Language Processing (NLP)

## Achievements and Certifications

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### 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

- Machine Learning Techniques using Numpy [\(Verify\)](#) April 2025
- 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