Arman Bishnoi

+91 7357416347 linkedin.com/in/arman-bishnoi armanbishnoi.official@gmail.com My Site

Education

Thapar Institute of Engineering And Technology September 2021 - June 2025
Bachelor of Engineering in Computer Science (AI) *Patiala, Punjab, India*

Experience

Amazon (Diamonds Program) January 2025 – June 2025
SDE Intern *Bangalore, India*

- Developed a widget *"Your Diamonds"* in the Amazon Mobile App for iOS/Android customers, visible under the 'You' tab.
- Built a WhatsApp notification system for the Diamonds Program, enabling users to receive messages for every Diamonds credit event.
- Created an internal React-Native web app tool for team use, enabling streamlined creation and management of product promotions.

ThapaSat (ELC) June 2023 - July 2023
Summer Intern *Patiala, Punjab*

- A signal processing algorithm was developed to convert over 1000 audio files into images, achieving a 95% success rate in producing clear weather maps. Backend Python code was created for detecting cyclones from satellite images, processing 60 images per minute with 90% accuracy in predicting cyclonic paths up to 36 hours in advance.

Projects

DialogFlow Chatbot — Python, FastAPI, MySQL, Dialogflow Code

- Engineered a conversational food ordering system enabling users to place, modify, and track orders via a Dialogflow chatbot.
- Developed the backend API (Python, FastAPI) to process Dialogflow webhooks, manage order states, and interact with a MySQL database.
- Integrated Dialogflow with a static frontend (HTML/CSS), handling intents for a complete order lifecycle.

AWS Inventory System — AWS Lamda, DynamoDB Code

- Developed AWS Lambda serverless solution to retrieve data from 20 AWS services, processing over 1500 records daily with 100% automation via AWS EventBridge scheduling and support for 50 concurrent executions without performance degradation.
- Implemented service-specific data storage across 20 separate DynamoDB tables, achieving 5ms average read/write latency and ensuring high availability and scalability of the entire system.
- Reduced manual audit time by 80% and increased data accuracy by 95% through automated resource tracking and management, eliminating manual data retrieval tasks.

Placed — Python, FastAPI, MongoDB Code

- Built job aggregation platform using Flask with interactive dashboard featuring Plotly visualizations, multi-filter job search (experience level, skills), and automated data refresh capabilities through scheduled background processes
- Developed machine learning pipeline using scikit-learn RandomForestClassifier and TF-IDF vectorization to automatically classify job experience levels and extract technical skills from job descriptions with 1000+ feature extraction
- Implemented scalable job scraping and analysis system with modular architecture including ML-enhanced NLP processing, database storage layer, and RESTful API endpoints for real-time job data updates

Landmark Detection — Python, PyTorch, Computer Vision Code

- Built a deep learning model to detect facial landmarks using PyTorch and the 300-W dataset.
- Preprocessed input data with OpenCV, augmented training data, and used a custom CNN achieving high accuracy in keypoint localization.
- Evaluated model performance using Euclidean distance between predicted and ground truth landmarks and visualized results using Matplotlib.

Optimized AWS-based ETL Pipeline for E-commerce Data Processing — Python, AWS S3, Redshift, Pandas Code

- Engineered and optimized Python-based ETL pipelines for large-scale e-commerce data, leveraging AWS S3 and Redshift; implemented advanced Pandas/NumPy transformations and multi-stage validation, achieving 99.8% data accuracy.
- Boosted ETL performance via multiprocessing, batch database inserts (40% speed improvement), and connection pooling; deployed cost-saving storage solutions using Parquet, Snappy compression (70-80% size reduction), and table partitioning (20% cost saving).
- Demonstrated proficiency in Python, Boto3, SQLAlchemy, and PyArrow, managing AWS/database configurations and implementing robust logging for monitoring and troubleshooting complex ETL workflows.

Skills

Programming Languages: Python, C++, SQL, HTML, CSS, Bash
Libraries and Tools: Scikit-learn, Pandas, NumPy, PyTorch, Power BI, AWS (S3, EC2, Lambda, DynamoDB), MongoDB
Concepts: OOPs, Machine Learning, Computer Vision, Data Analysis, ETL Pipelines, Serverless Architecture, Cloud Automation
Problem-Solving: Debugging, Optimizing Performance, Algorithm Design
Soft Skills: Collaboration, Communication, Analytical Thinking
OS used: Mac, Linux