

AVINASH RANJAN

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CAREER OBJECTIVE

Highly motivated and results-oriented technology professional seeking a challenging role in a dynamic organisation. I aim to leverage my expertise in full-stack development, AI/ML engineering, and cloud infrastructure to contribute to the growth and success of the company while continuously enhancing my skills.

SKILLS

Programming Languages: Python (OOP, API Development, NumPy, Pandas, Matplotlib), PHP (Core PHP, API Development & Integration), JavaScript, jQuery

AI/ML Expertise: Large Language Models (LLMs), Prompt Engineering, Natural Language Processing (NLP), Exploratory Data Analysis (EDA), Model Training & Fine-tuning, AI/ML-driven Solution Design, Vector Embeddings, RAG (Retrieval-Augmented Generation), LangChain, OpenAI API, AWS Bedrock

Web Development Frameworks: Laravel, Django, React.js

Database Management: MySQL, PostgreSQL, Vector Databases (pgvector, Pinecone)

DevOps & Containerization: Docker, Kubernetes, CI/CD pipelines, Container Orchestration

Version Control & Cloud: Git, GitLab, AWS (EC, S, Lambda, Bedrock)

Others: MS Office Suite (Word, Excel, PowerPoint), Unit Testing, Agile Methodologies

EXPERIENCE

DIAI (DeepLogic AI) - Django Developer

August - Present

- Leading backend development, focusing on developing complex APIs and AI/ML-driven solutions using Django

- Architected and implemented LLM-based document processing systems using OpenAI and AWS Bedrock for intelligent data extraction
- Designed and developed vector database solutions using pgvector and Pinecone for semantic search and similarity matching
- Built AI-powered email agents leveraging Large Language Models (LLMs) for automated document processing and key-value extraction
- Implemented RAG (Retrieval-Augmented Generation) pipelines for enhanced document understanding and question-answering systems
- Collaborated with cross-functional teams to deploy AI/ML models in production environments
- Optimized AI/ML workflows and improved processing accuracy for document similarity search across + files

SRV Technology - Full-Stack Developer

July - July

- Developed and maintained full-stack applications using Laravel, Django and React.js
- Worked on API integration, database design, and deployment
- Implemented Docker containers for application deployment and scaling
- Built machine learning models for data analysis and prediction systems

PROJECTS

EPIC Email Agent - AI-Powered Document Processing (DLAI) - Technologies:

Django, AI/ML, LLM, Vector Search, PostgreSQL, OpenAI, AWS Bedrock - Developed an intelligent email agent using Large Language Models (LLMs) and vector databases to automatically extract key-value pairs from emailed PDFs - Implemented advanced prompt engineering techniques for improved extraction accuracy - Integrated RAG architecture for context-aware document understanding

Document Similarity Engine - Technologies: Python, Django, PostgreSQL, HNSWlib, OpenAI/AWS Bedrock, Vector Embeddings - Implemented a sophisticated PDF similarity search system using vector embeddings and cosine similarity - Processed and indexed + documents with high-dimensional vector representations - Enabled semantic search capabilities for retrieving most relevant documents based on meaning, not just keywords

EPIC (DLAI) - Technologies: Django, JavaScript, jQuery, PostgreSQL, HTMX, AI/ML - Implemented an AI-powered system to mark bounding boxes on PDFs, extracting key-value pairs with machine learning accuracy calculation - Leveraged computer vision and NLP techniques for intelligent document parsing

House Price Prediction - Machine Learning Portal - Technologies: Jupyter Notebook, Flask, AI/ML, Machine Learning, Python, JavaScript, Data Science - Developed an end-to-end machine learning application for house price prediction using regression algorithms - Implemented data preprocessing, feature engineering, and model training pipelines - Created interactive web interface with real-time predictions and data visualization

Digital Transformation Centre (DLAI) - Technologies: Django, PostgreSQL, Docker, Kubernetes - Built a scalable low-code SaaS platform enabling task automation through script execution - Containerized applications using Docker and orchestrated with Kubernetes for high availability - Implemented multi-channel integration capabilities (Email, SFTP, FTP) for automated file processing

Bit_Vault - Technologies: Python, Django, PostgreSQL, Encryption - Developed a secure file vault system to encode and store files (PDF, Word, CSV, PNG, MP) in binary format, with encryption and decoding using a secret key for secure restoration

Blackbox Logger - Technologies: Python, Django, Flask, PyPI - Created a Python package (blackbox_logger) for logging all request/response data with sensitive data masking, enabling secure auditing of API interactions across applications

Dic SearchBot (DLAI) - Technologies: Flask, React, Django, API Integration, AI/ML - Created an AI-enhanced platform allowing users to search through cloud storage for PDFs and receive results with highlighted keywords via email

Japio Data Analysis project (SRV) - Technologies: Django, MySQL, JavaScript, Google Charts, HTML/CSS - Transformed and visualised data from multiple sources for informed decision-making using Japio's platform

Fz-awards (SRV) - Technologies: Laravel, PHP, HTML/CSS, JavaScript, jQuery, MySQL - Developed a one-page news website with a customised admin panel for content management

Email SMS Marketing Software (SRV) - Technologies: Django, Python, HTML, jQuery, MySQL, Twilio, SendGrid - SMS management system with email and SMS marketing capabilities integrated with Twilio and SendGrid

Nxtgems (SRV) - Technologies: Core PHP, HTML, JavaScript, jQuery, MySQL - Developed an advanced education management system with features like online video classes and mock tests

Lead Management (SRV) - Technologies: React.js, JavaScript, jQuery, MySQL, Laravel - Designed and developed a lead management platform for credit card applications from various banks

EDUCATION

Master of Computer Applications (Data Science)

Jain University, Bangalore, India | July - June

Bachelor of Computer Applications

Techno India Salt Lake, Kolkata, India | July - June