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|  | **Deepak Bhavsar** | **Email Id – d.bhavsar@zensar.com**  Ph:9727681792  Location: Pune |  |  |

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| ***Summary*** | With nearly 7 years of diverse experience, I excel in tackling business challenges through the development of AI-based applications. I leverage advanced techniques to craft innovative solutions, driving efficiency and growth across various domains. Skilled in fine-tuning models, prompt engineering, and AI-driven automation to enhance business intelligence. Passionate about building scalable AI applications, deploying models, and integrating AI with cloud services to drive innovation and efficiency. |

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| ***Education*** | * B.Tech in Computer engineering [2017-2020] |

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| ***Core competencies/skills*** | ***Category*** | **Primary skills** | **Secondary skills** |
| ***Domains*** | LLMs ,RAG, Model Deployment , Python , Node.js | Angular, React js, Javascript |
| ***Tools & Techniques*** | Azure OpenAI (GPT-4, GPT-4o-mini, GPT-3.5) , Hugging Face transformers | LangChain |
| ***Databases*** | Azure Cognitive Search, AWS Opean Search , PineCone, Pgvector | SQL, BigQuery,Mongo DB, Snowflake |
| ***Programming skills*** | Node js, Python |  |

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| ***Expertise*** | * GenAI * Python * Docker * Blockchain |

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| ***Certifications*** | * Python Programming and Generative AI |
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| ***Awards*** | * NA |

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| ***Experience Summary*** | 1. **Data Explorer:**  **April 2024 – June 2024**    * **Role**: Generative AI Engineer    * **Description**: Built an AI-driven data exploration tool that allows users to query databases using natural language, automatically generating SQL queries and insights.    * **Technologies**: Prompt Engineering, Python, React, SQL    * **Services**: OpenAI GPT-4    * **Achievements**:      + Implemented natural language-to-SQL conversion, enabling users to ask questions in simple English.      + Developed an LLM-powered query optimizer, refining and executing SQL queries dynamically.      + Integrated AI-driven data visualization and insights, helping users derive actionable intelligence from results. 2. **Metadata Enrichment**: **April 2024 – June 2024**    * **Role**: Generative AI Engineer • Description: Developed an AI-driven metadata enrichment tool that enhances dataset schemas, enabling intelligent query generation and improved data exploration. The system automates schema understanding and integrates with AI-powered SQL generation for seamless database interaction.    * **Technologies**: Prompt Engineering, Python, React, SQL    * **Services**: Azure OpenAI GPT-4    * **Achievements**:      + Implemented AI-based schema enrichment, automatically enhancing dataset structures for better usability.      + Developed LLM-powered SQL generation, allowing users to generate complex queries based on enriched metadata 3. **HR Chatbot for Candidate Selection**: **March 2024 – April 2024**  * **Role**: Generative AI Engineer * **Description**: Developed an AI-driven HR chatbot that enables recruiters to upload and manage resumes efficiently. The system leverages Retrieval-Augmented Generation (RAG) to analyze candidate profiles and provide instant responses to recruiter queries. Using metadata-enriched embeddings stored in Pinecone, the chatbot allows HR professionals to interact with resumes dynamically, shortlist candidates, and make datadriven hiring decisions. * **Technologies**: Python, React, LangChain, LLMs (GPT-4), Pinecone, FlaskAPI * **Services**: Azure OpenAI GPT-4, Pinecone Vector Database * **Achievements**:   + Implemented a resume ingestion pipeline, where HR can upload resumes, extract metadata, and store embeddings in Pinecone.   + Developed LLM-powered query processing, allowing recruiters to ask hiringrelated questions and receive precise candidate recommendations.   + Enabled metadata-driven retrieval, ensuring accurate and context-aware responses by leveraging resume embeddings.   + Built an intuitive frontend chatbot interface for real-time interaction and candidate filtering.   + Integrated LangChain for optimized document retrieval and response generation, enhancing AI-driven decision-making.  1. **Blockchain-Based Supply Chain Management**  **July 2023 – March 2024**  * **Role**: Blockchain Developer * **Description**: Developed a Hyperledger Fabric-based Supply Chain Management System that provides end-to-end product traceability. The system enables users to track a product’s manufacturing, processing, and distribution with a single click, ensuring transparency and authenticity. By leveraging blockchain’s immutability, every stage of the supply chain is securely recorded, allowing businesses to verify product origins, prevent fraud, and optimize logistics. * Technologies: Hyperledger Fabric, React, Node.js, Chaincode (JavaScript) * Services: Hyperledger Fabric Network, Docker * **Achievements**:   + Implemented smart contracts (chaincode) to record and verify product details across the supply chain.   + Integrated Hyperledger Fabric for decentralized and tamper-proof supply chain records.   + Enabled real-time visibility into manufacturing, processing, and distribution stages.   + Ensured secure and auditable product traceability, improving supply chain efficiency and reducing counterfeit risks.  1. **HLF Cards** **April 2023 – April 2024**  * **Role**: Sr. Software Engineer * **Description**: The project is aimed at creating a POC based on Hyperledger fabric permissioned blockchain that will help in settling merchant’s card payments in a decentralized fashion * **Technologies**: JavaScript, React, Node.js, Hyperledger Fabric, Docker * Achievements:   + Lead a front-end team to complete UI/UX tasks and test the application   + Involved in research, implementation & deployment of Hyperledger fabric based Chain code in local system.   + Involved in unit testing the Chain code. |

**PROFESSIONAL EXPERIENCE**

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| **Project – Code Automation & Data Tech Modernization** [July 2024 – August 2024]  **Role:** Software Developer  **Project Description:**  Developed a code automation and data modernization solution that streamlines database migrations, language translations, document generations, and code transformation processes. The system enables users to upload code and select from a predefined list of software artifacts (such as business requirements, technical design documents, and test cases), which are then generated based on the provided input. Additionally, the solution facilitates code migration, transforming source or uploaded code into the desired selected target format to support seamless software modernization.  **Key Responsibilities:**   * Designed and maintained Python-based backend services to handle user interactions and process LLM outputs. * Developed structured prompts for LLMs, embedding step-by-step instructions and rules to enhance output consistency. * Implemented advanced prompt engineering techniques to improve LLM comprehension and response quality for complex tasks. * Automated database format conversions using LLM-generated transformation rules. * Enabled document selection functionality, allowing users to choose and generate business requirements, technical design documents, or test cases based on input code. * Developed code migration capabilities, enabling seamless transformation of source code into the required destination format. * **Added feature to generate MD70 documents for PL/SQL code, enhancing documentation capabilities.** * Conducted extensive testing and validation to ensure accuracy, reliability, and alignment of LLM-generated outputs with expected results.   **Technology Stack & Tools:** Platform: VS Code  **Skills:** Prompt Engineering, Python (Flask), React  Project -Virtual Assistance for Client AAA [Jan 2024 – Mar 2024]  **Role:** Gen AI Developer  **Project Description:**  Developed a virtual assistant capable of querying databases based on natural language questions. This tool enhances user interaction by allowing intuitive and efficient data retrieval, tailored to the specific needs of Client AAA.  **Key Activities Performed:**   * Generated metadata for the tables and stored it in the database. * Developed prompts using the few-shot learning technique. * Integrated data visualization and insights, helping users derive actionable intelligence from results.   **Technology/Skills/Tools used**   * **Tools:** VS Code * **Technologies:** Python, Postgres, Azure OpenAI, Postgres, Oracle SQL database  **Project – Synthetic Data Generation Application** [Mar 2023 – Dec 2023] **Role:** Gen AI Engineer  **Project Description:** Developed a robust application to generate high-quality synthetic datasets from user-provided samples. The tool ensures privacy compliance, offers advanced filtering options, and allows customization of numeric value ranges and SdTypes. This application is designed to support researchers, developers, and organizations in overcoming data limitations and enhancing data-driven projects.  **Key Activities Performed:**   * Analyzed tables to identify and understand relationships between them. * Implemented features to add or edit table relationships. * Customized data types to ensure Personally Identifiable Information (PII) is unique and resembles real-world data. * Used **HMASynthetiser** to generate synthetic data for multiple tables.   **Technology/Skills/Tools used**   * **Tools:** **SDV** * **Technologies:** Python, Postgres, Azure OpenAI * **Skills:** GenAI, Prompt Engineering   **Project – Metadata (AI Powered Data Enrichment)**  **Role:** Generative AI Engineer  **Project Description:**  Developed an AI-driven metadata enrichment tool that enhances dataset schemas, enabling intelligent query generation and improved data exploration. The system automates schema understanding and integrates with AI-powered SQL  generation for seamless database interaction.  **Technology/Skills/Tools used**   * **Tools:** **VSCODE** * **Technologies:** Python, Postgres, Azure OpenAI GPT-4o * **Skills:** GenAI, Prompt Engineering   **Buy Now Pay Later (BNPL) using Blockchain [ Sep 2022 – Mar 2023]**  **Role:** Software Developer  **Project Description:** Reconciliation challenges and extended settlement times within client’s BNPL Business Line, leading to operational inefficiencies and customer dissatisfaction, Leverage blockchain to explore novel solutions to streamline reconciliation processes to accelerate merchant settlements enhancing overall competitiveness. Launched a blockchain enablement framework designed to tackle financial transaction challenges in the digital realm. Covers payments, money transfers, smart contracts, syndicated loans, credit, ensures regulatory compliance and audit, robust risk management. Role: Blockchain Engineer Technology used: Hyperledger fabric, AWS, Nodejs, Python.  Achievements:   * Designed Blockchain Network Architecture * Developed And Deployed Multi-Host Hyperledger Fabric Network on AWS VM. * Developed Smart Contracts to eliminate Reconciliation challenges and deployed it onto Hyperledger Fabric Network. * Developed Blockchain APIs using Fabric SDK to integrate with UI. |
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