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|  | **Rishu** |  |
| **Kumar** |
| **Senior Staff Engineer** | |
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| **Professional Summary** |  | Senior Data Scientist and AI/ML Architect with 14 years of experience in designing and implementing scalable AI/ML solutions across diverse domains. Proven expertise in Generative AI,Agentic AI, Deep Learning and Traditional ML with a strong track record of leading cross-functional teams to deliver impactful business outcomes. Skilled in translating complex business requirements into technical solutions, leveraging cloud platforms like AWS and Azure. Adept at mentoring teams, driving innovation, and aligning AI/ML strategies with organizational goals*.*  He recently worked on RAG Based Chatbot using Generative AI on AWS Platform in Insurance Domain which used Cohere for embedding, Pinecone as vector Database and Claude Sonnet 3.5 as Foundation Model. |

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| **Education** |  | * Bachelor of Engineering, Electronics and Communications, Bangalore Institute of Technology, Bengaluru, Karnataka, India * Post Graduation Diploma in Data Science, International Institute of Information Technology, Bangalore, Karnataka, India. |

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| **Skill Set** |  | * Areas of competencies includes Both Traditional Machine Learning like Classification, Regression, Deep Learning as well as Generative AI * Expertise in Cloud Platforms like AWS and Azure. |

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| **Programming Languages** | * Python, R, SQL, PL/SQL, Spark |
| **AI/ML Framework** | * TensorFlow, Keras, PyTorch, Scikit-learn, Hugging Face, AWS Bedrock, OpenAI, Anthropic Claude. |
| **ML/DL Techniques** | * Generative AI, Agentic AI, NLP, Deep Learning (LSTM, RNN, BERT), LLM, RAG, Vector Databases, Time Series Analysis, Clustering, Classification |
| **Database** | * DynamoDB, Oracle Database |
| **Tools and platforms** | * Tableau, Azure Speech Studio, AWS Textract, Pinecone, Cohere |

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| **Honors and Awards** |  | * Collaborator award, Star Award , Champion Award. |

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| **Recent Projects** |  |  |

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| **Project name** |  | **Document Navigator – Generative AI Based Chatbot** |
| Client |  | Developed Product for inhouse Product Enablement Team in Insurance Domain. |
| Duration |  | May 2024- May 2025 |
| Description |  | Developed a chatbot application for Product Enablement Team that allows users to upload PDF documents and query them using Generative AI. Integrated AWS Bedrock to call Claude Sonnet 3.5 and implemented Retrieval-Augmented Generation (RAG) for enhanced contextual understanding. |
| Technology Stack |  | Python, Large Language Model (LLM), AWS bedrock, Cohere, Pinecone, RAG, Claude Sonnet 3/3.5 |
| Responsibilities |  | * Designed the AI Solution for end-to-end solution from ML perspective. * Developed the Initial Prototype for POC. * Coordinated with the UI/UX and Backend team to ensure the production grade product is created. * Handled technical issues such as hallucinations and resolved them promptly * Identified any bugs occurring in the application as well as fixed them |

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| **Project name** |  | **Automated Billing Review – Deep Learning** |
| Client |  | Insurance and Legal Domain Product |
| Duration |  | April 2023-May 2024 |
| Description |  | Project involved creation of AI/ML solution to analyse each invoice line item based on a set of compliance codes and narratives to determine if the line item is compliant with the billing guidelines of the company. |
| Technology Stack |  | Python, Deep Learning, RNN, LSTM, BERT, NLP, Bi-directional LSTM, AWS Lambda, AWS API Gateway, AWS Sagemaker, Tensorflow 2.0 |
| Responsibilities |  | * Multi Class Text Classification Problem. Cleaning the Texts, pre-processing of Narrative Text columns and used Deep Learning RNN Bidirectional LSTM with self-attention for classification. * Designed the Solution by working with different Classification Algorithm. * Finetuned the Solution. * Used AWS Lambda to Call the Endpoint deployed on Sagemaker * Supported and contributed to agile software deployments |

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| **Project name** |  | **Product Data Generator – Generative AI Based.** |
| Client |  | Developed Product for inhouse Product Enablement Team in Insurance Domain for Conversion and Migration Team. |
| Duration |  | January 2023- April 2023 |
| Description |  | Developed a tool for Conversion & Migration team based on Generative AI to create Factsheet from product specs. |
| Technology Stack |  | Python, LLM, AWS Bedrock, Claude Sonnet 3.5, DynamoDB Table, AWS Lambda, AWS Textract. |
| Responsibilities |  | * Designed the AI Solution for end-to-end solution from ML perspective. * Leveraged Generative AI and LLM Claude Sonnet 3.5 using AWS Bedrock Framework. * Developed the Initial Prototype for POC. * Coordinated with the UI/UX and Backend team to ensure the production grade product is created. * Handled technical issues such as hallucinations and resolved them promptly * Identified any bugs occurring in the application as well as fixed them |
| **Project name** |  | **Incident Classifier – Classification and Deep Learning** |
| Client |  | To classify incidents raised as part of security Observation to be handled as escalated and deploy as Rest End Point to be used by SAP team. This was done for Biggest Petroleum Company in World. |
| Duration |  | January 2022- January 2023 |
| Description |  | NLP Problem. Cleaned the Texts, pre-processing of text columns and used Deep Learning RNN Bidirectional LSTM for classification. MLOps pipeline was created on Azure Cloud using MS Python SDK on Azure ML Workspace. |
| Technology Stack |  | Python, Azure ML workspace, Azure Kubernetes Services (AKS), Azure Application Insights, Azure DevOps for MLOps, Python SDK for Azure pipeline. |
| Responsibilities |  | * Designed the AI Solution for end-to-end solution from ML perspective. * Developed the Initial Prototype for POC. * Designed the Solution by working with different Classification Algorithm. * Finetuned the Solution. * Created MLOps Pipeline using Azure ML Workspace experiments. |

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