|  |  |
| --- | --- |
| Education  **G.L. BAJAJ INSTITUTE OF TECHNOLOGY**  Bachelor of Technology  (Electronics and Communication)  Graduated May 2012  **ASN Sr. Sec. School**  **Senior Secondary (CBSE)**  Graduated March2007  Skills  **Programming language**  ★★★★★  **Python**: ★★★★☆  **Tools**  ★★★★★  ★★★★★  ★★★★★  ★★★★★  ★★★★★  ★★★★★  **Jupyter** ★★★★☆  **Anaconda** ★★★★☆  **Pycharm** ★★★★☆  **VSCode** ★★★★☆  **ArcGIS** ★★★★☆  **QGIS** ★★★★☆  **DL/ML Stack**  ★★★★★  ★★★★★  ★★★★★  ★★★★★  ★★★☆☆  ★★★☆☆  ★★★★★  ★★★★★  ★★★★☆  ★★★★☆  ★★★★☆  ★★★★☆  **DL algorithms** ★★★★☆  **Pytorch** ★★★★☆  **Fastai** ★★★★☆  **Transformers** ★★★★☆  **Keras** ★★★★☆  **Pyspark** ★★★★☆  **Pandas** ★★★★☆  **ArcGIS Python API** ★★★★☆  **GDAL** ★★★★☆  **Langchain** ★★★★☆  **Llama Index** ★★★★☆  **Unstructured** ★★★★☆  **Cloud platforms:**  ★★★★★  ★★★★☆  ★★★☆☆  **AWS**  **Azure**  **GCP ML APIs** ★★★☆☆  **OS / Virtualization:**  **Linux**  **Windows**  **Docker**  **Other tools:**  **ArcGIS Pro**  **Redis Cache**  **MS Project Server**  **Sharepoint 2013**  **SQL**  Interests  **Trail running, hiking.**  **Deep learning evangelism.** | 396-B, Pocket-2,  Mayur Vihar, Phase-1  New Delhi  +91-9555452237  writetoakhilnegi@gmail.com  [writetoakhilnegi@gmail.com](mailto:writetoakhilnegi@gmail.com)  Akhil Negi  Manager  Data & Analytics  Experience  **EY Global Delivery Services**  Manager – Data and Analytics  December 2021 – Present  **Generative AI Center Of Excellence setup:**  Successfully set up a fully operational Generative AI Center of Excellence.  Implemented a strategic roadmap for generative AI applications, resulting in the development and deployment of key Generative AI projects.  Core Responsibilities**:**   * + Established Core workstreams: GenAI training and enablement, Innovation, Generative AI factory, GenAI SOPs and best practices.   + Spearheaded the development of distinct workstreams within the COE, involved in shortlisting nominations, and defined the core responsibilities and strategic vision for each workstream.   + Strategic Planning and Execution: Developed a comprehensive two-month backlog for each workstream, ensuring alignment with long-term business goals and facilitating smooth initial operations.   + Resource Allocation and Funding: Managed prioritization for Generative AI initiatives, focusing on the development and delivery of prioritized use cases to maximize return on investment and enhance operational efficiencies.   **Led the design and development of MVPs with generative AI models, directly impacting key areas such as:**   * + Enterprise knowledge management and discovery, enhancing information accessibility and improving decision-making.   + Optimizing contact center operations through AI-driven insights, boosting customer service and operational efficiency.   + Application leveraging RAG, LLM Agents and tools**:**     - ESG benchmarking     - Code documentation and translation.     - NL query for structured data.     - Document comparison and disclosure validation.     - Web search based cataloging tool.   Core Responsibilities:   * Helping customers with analyzing their current processes and identifying transformation areas. * Requirement analysis, discovery, drafting high-level and low-level application design. * Going through the latest state of the art research. * LLM and framework selection. * Training data preparation. * Pre-processing pipeline design and development. * Evaluation pipeline design and development.   Tech stack: Azure OpenAI, Azure app service, Opensource LLMs (llama, mistral, etc.), whisper, Azure STT/TTS, Azure AI search , Langchain, LangSmith, LlamaIndex, peft, evaluate, ragas, promptfoo, vLLM, bitsandbytes, tiktoken, Lamini, hugginface-transformers, chromaDB, redis, FAISS, Streamlit, FastAPI.  **Implementation of a transactional fraud detection strategy for a leading UK bank:**  Worked as a Sr. Data Scientist for customization and implementation of transaction fraud detection strategy for a large UK bank  Core Responsibilities:   * Data feed validation, mapping and transformation. * Data preparation for model selection and training. * MVP and production model building * Building fraud strategy rules for augmenting model decisions. * Shadow model monitoring and production deployment. * Live model monitoring.   Tech stack : LightGBM, XGBoost, Random Forest, Python, Pyspark, JupyterLab, GCP DataProc, Hadoop  **Lead the development of a Data Monetization platform for a major power and utility sector client:**   * + Analyzed power consumption data for millions of customers across different regions to come up with high quality reliable insights.   + Contributed to the data monetization strategy by developing high quality spatial trends and predictions to be monetized as Data Insight reports and data enrichment API.   + Leveraged spatial analytics, countrywide power consumption data (over a decade), powerful regression models to generate different insightful reports:     - Up and coming neighborhoods.     - Real-estate development trends.     - Commercial and residential development trends.     - Geographic socio-economic indicators.   Tech stack: QGIS, SAP BW, Python, JuPyter, Folium, Streamlit, Pytorch, scikit-learn, GDAL, Shapely, GeoPandas  **Lead the development and implementation of a Document AI solution for a significant client in the Chemical (procurement) sector for transforming their raw material procurement pipeline:**  Core Responsibilities:   * + Lead the project from conceptualization to deployment, ensuring the solution effectively streamlined procurement processes.   + Data ingestion pipeline design and development on Azure.   + Database modelling and UX design.   + Led the training data labelling effort with 6 junior DS and experts chemists from the client team. Output: 50k labelled documents.   + Optimized the labelling data process by developing AI assisted labelling approach.   + Drove model pipeline development. As part of which 16 classification and ner models were trained and iterated to achieve acceptable performance.   + Setting up a feedback loop to retrain models with user feedback.   Tech stack: Azure logic apps, Azure functions, Azure language studio, Azure Form-recognizer, Python, Huggingface-transformers, Doccano, CosmosDB  **Contributed to business development efforts by:**   * + Initiating and executing multiple Natural Language Processing (NLP) and Computer Vision (CV) POCs for clients across different industries, showcasing the practical benefits of AI technologies.   + Utilizing technical and project leadership skills to foster company growth and widen its client base with innovative AI solutions.     **ESRI New Delhi R&D center (Environmental Systems Research Institute)**  Data Scientist 2  May 2019 – November 2021   * Played a pivotal role in the ArcGIS Python API team, integrating cutting-edge deep learning models for processing imagery, unstructured text, and 3D point cloud data. * Served as Product owner for the Python API text module, leading agile practices and facilitating the seamless development and delivery of product enhancements. * Drove the research and development of new datasets, spearheading the training of production-scale deep learning models on multi-GPUs. These models were primed for publication on the ArcGIS Living Atlas, showcasing a blend of technical acumen and strategic project direction. * Assumed the role of NLP specialist, overseeing the curation and maintenance of the text sub-module within the Python API, ensuring the delivery of robust NLP capabilities. * Identified and pursued opportunities for enhancing the existing product ecosystem with ML/DL technologies, demonstrating a strategic approach to product development and innovation. * Led the deployment of ready-to-use models as web services on cloud infrastructure, facilitating the operationalization of deep learning models for broader accessibility and impact. * Collaborated across teams to embed deep learning solutions within various products:   Few examples of DL inclusion:   * + Enhancing search and discoverability in ArcGIS Online.   + Implementing solutions for the redaction of personally identifiable information from public documents, thereby elevating privacy and security measures. * Championed the Python API and the team’s innovations through presentations at Webinars, ESRI Developer Summits, and user conferences, effectively communicating the value and applications of our work to a wider audience.   **Tata Consultancy Services (Life Sciences- TEG)**  Data Scientist  Jan 2017– Mar 2019   * Engaged with stakeholders to comprehensively understand their processes, laying the groundwork for targeted improvements. * Analyzed the existing workflows to pinpoint opportunities for ML/NLP applications, aiming to enhance operational efficiency. * Collaborated closely with fellow developers to extract and prepare the necessary data for analysis and modeling. * Developed and enforced data labeling guidelines, overseeing the manual labeling efforts carried out by my team for training data preparation. * Outlined the technical infrastructure needs, leading the setup of Virtual Machines (VMs) on the Google Cloud Platform to support our computing requirements. * Architected and implemented a data cleansing and preprocessing pipeline, ensuring data quality and readiness for model training. * Conducted thorough research on cutting-edge deep learning architectures and academic papers, adapting state-of-the-art solutions to meet our specific project needs. * Took charge of model development, from initial building and training to fine-tuning and establishing deployment pipelines, ensuring models are ready for production use. * Provided ongoing support to the team, troubleshooting and resolving challenges encountered during the model training process. * Focused on team capability enhancement by hiring and mentoring new ML talents, fostering a skilled and knowledgeable workforce.   **Tata Consultancy Services (Ameriprise Financial)**  Sharepoint developer/Project Server SME  Mar 2013 – Sep 2016   * Design, develop, and manage site content and capabilities and provide daily onsite maintenance of the existing SharePoint portals. * Design intelligent form-based applications (InfoPath) as per business requirements. * Work with Project Managers, providing accurate development estimates as requested. * Ensure systems change management is carried out in accordance with agreed standards and procedures on Service Now. * Walkthrough of the design and code to the Production support team and Change management team. * Reporting of status to the client through weekly meetings. * Act as Project Server SME for Project Management Group. * Assist PMs with the maintenance of project pages in SharePoint. |
|  |  |