



Sanjib K Basu, AI Architect

Contract Details

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sanjib007@gmail.com
location : Greater Hartford, CT

LINKS

LinkedIn

Education

Postgraduate in AI/ML : The
University of Texas at Austin - Red
McCombs School of Business (GPA:
4.29, Rank 1) - 2021
Bachelors of Technology (Hons.) –
Indian Institute of Technology,
Kharagpur - 2000

SKILLS

Enterprise Architecture, Solution
design, Automation
Agentic AI, Generative AI, AI
Governance,
Machine Learning, Data Analytics
and Engineering,
Cloud : Azure, AWS,
Domain : Healthcare (CVS, Cigna,
Pfizer – combined experience over
10 years), Insurance (The Hartford,
Travelers)
Team Leadership
(Details follow)

PROFILE

Technology Leader over two decades, experience in solution design and delivery, specializing in AI, machine learning, Cloud, Data Analytics solutions for Fortune 500 companies and government entities. Expertise includes the design and development (hands on) of enterprise applications, including agentic and generative AI projects recognized with industry awards. Proficient in machine learning, natural language processing, and cloud technologies, with a strong focus on delivering impactful solutions that drive substantial business benefits.

EMPLOYMENT HISTORY

AI Architect (AVP) at Hexaware Technologies, Hartford County, Connecticut, United States (Customer : Wipfli, Ryder)
July 2024 — Present

Solution Design & Development:

Led the architecture, design, and end-to-end development of Generative AI solutions for multiple clients.

Notable Projects:

Functional Requirement Document Generation:

Developed an application that automatically generates functional requirement documents in standardized templates from meeting notes, call transcripts, and other unstructured sources. The application expedited the process of Functional Requirement Template by 2X and standardized the process.

Multi-modal Conversational AI Assistant:

Architected an advanced RAG (Retrieval-Augmented Generation) solution leveraging unstructured.io, enabling document question answering with both image and text responses. This tool significantly improved efficiency for floor engineers referencing complex engineering manuals.

Agentic AI Document Processing:

Designed and implemented a multi-agent AI system (planner, RAG, OCR, report generator) for automated financial advisory report creation, reducing report generation time from one week to minutes.

Above solutions were deployed on Azure cloud services.

Various Engagements:

Conducted comparative analyses of tools, methodologies, and frameworks to guide technology selection and ensure best-fit solutions for client use cases.

Supported ISG survey by showcasing Hexaware’s generative AI capabilities. Hexaware is rated in the leader quadrant of ISG mid-size development and service provider.

Forged collaborations and partnerships with leading AI and cloud providers, including Cohere, Microsoft, NVIDIA, and AWS. Hexaware is Microsoft AI council member.

Supported multiple RFPs (Requests for Proposals) with tailored AI solution accelerators.

Represented Hexaware’s generative AI practice at industry forums and conferences, demonstrating solution accelerators and sharing insights. My employer was recognized as AI Solutions Implementer for the year 2024 by The AI Conics, at NY AI Summit.

Employment History (Continued):

Principal Consultant, AI at Wipro Limited, CT, United States (Customer : Cigna, Verizon)

May 2021 — July 2024

Oversaw AI projects within the AI-COE for a leading healthcare payor, focusing on innovative solutions and advanced analytics.

- Created a question-answer chatbot on Policy Documents with high accuracy and low latency that won industry award.
- Directed initiatives in Document Classification, Entity Extraction, and Intelligent Document Processing, utilizing Azure Form Recognizer for Grievances and Appeals documents.
- Automated the Digital Operation Center for a Fortune 20 company, enhancing operational efficiency with auto-monitoring and near real-time anomaly detection, leading to a 10% reduction in annual costs and a 15% improvement in turnaround time.
- and developed analytics on call center transcripts to enhance call quality and reduce call volumes through process improvements.
- Conducted gap analysis assessments for ML platforms, comparing products and identifying areas for development in machine learning deployment.
- Collaborated with TruEra on projects related to Ethical AI and Explainable AI, ensuring adherence to best practices in AI implementation.

Wipro was awarded NASSCOM AI Gamechanger Award in 2023-24.

Sr. Technology Architect at Infosys Limited, CT, United States (Customer: CVS, Travelers, Pfizer)

June 2017 — May 2021

Focused on developing and implementing advanced technology solutions in healthcare and pharmaceutical domains, with a strong emphasis on machine learning and cloud architecture.

- Designed and implemented machine learning solutions to forecast Emergency Room visits, incorporating data engineering insights based on physician consultations and research.
- Refactored a monolithic Angular application into micro-front end applications for a Prescription Benefit Management system, enhancing operational efficiency.
- Led the architectural evaluation and recommendations for Auto-ML tools in an RFP for a major pharmaceutical company, assessing their strengths, weaknesses, and use-case applicability.
- Developed an analytics framework Model-as-a-Service for a leading Business Insurance firm, utilizing NodeJS and DevOps methodologies to support predictive modeling and anomaly detection.
- Executed a significant modernization project for a Global Pharmaceutical leader, overseeing cloud migration and creating architectural roadmaps to improve regulatory compliance and performance.

Own Social Responsibility in response to COVID Pandemic (additional initiative):

March 2020 — January 2021

Focused on social responsibility initiatives through technology during the pandemic.

- Designed a COVID-19 dashboard utilizing AI to identify high-risk areas, providing free access to millions daily.
- Assisted a technology startups during their early stages to address the social challenges posed by COVID-19.
- Authored blogs on data science and technology architecture.
- Participated in the Global IIT Artificial Intelligence Forum.

Technology Manager, Enterprise Architect at Deloitte-VLINK (Customer: The State of Connecticut)

March 2015 — June 2017

Oversaw the design and execution of a large-scale Enterprise Application project for the State of Connecticut's Department of Social Services, focusing on eligibility systems.

- Directed the architecture and implementation of the "ImpaCT" system, Eligibility system for Social Services Programs a multi-year project with a budget exceeding nine figures.
- Managed various technical processes including Solution Design, Infrastructure Capacity Planning, and Performance Testing for the project's extensive scope.
- The complex system comprising over 200 web pages and 150+ health service programs, with a robust infrastructure supporting 1000+ concurrent users and multiple testing environments.
- Engaged with clients and stakeholders at all levels, facilitating communication and decision-making throughout the project lifecycle.

Technical Project Manager at Cognizant Technology Solutions, (Customer: The Hartford, Voya)

January 2010 — March 2015

Oversaw the transformation of the Group Benefits Application Portfolio, focusing on technology updates and performance enhancements.

- Increased the technology currency of the Group Benefits Application Portfolio from 12% to approximately 60% over a period of two years, while managing a project budget exceeding \$5 million.
- Directed multiple technology upgrade initiatives, handling the entire project life cycle as the Hartford Project Manager while serving as a consultant for Cognizant in Connecticut.
- Coordinated with various vendors throughout all project phases, ensuring seamless integration with other concurrent projects.
- Led the migration to Cloud IaaS and the upgrade of FileNet for BPM and Content Management by assessing multiple cloud solutions and product vendors.
- Executed performance tuning and infrastructure upgrades for a complex .Net-based web application by collaborating with technology experts from Cognizant, Microsoft, and IBM.

Technical Project Manager at Mahindra Satyam (Customer : Walgreens, BP)

July 2007 — January 2010

- Oversaw a portfolio of applications for British Petroleum® focused on inventory control and supply chain management, managing an annual budget of \$1.5 million.
- Led the British Petroleum® project, managing application support and enhancement requests within the service level agreement.
- Supervised a team of 18 across multiple locations, coordinating tasks, monitoring incidents, and ensuring quality assurance in project execution.
- Implemented best practices like automated code reviews, contributing to improved client satisfaction and project outcomes.
- Assisted Walgreens® Corporate PMO with the development of the 'Plan-view Support' web application, integrating it with the Remedy Tracking Tool, which resulted in cost and time savings.
- Served as Technical Lead for Walgreens® Next Generation Point-of-Sale project, conducting product evaluations and developing a proof of concept with gap analysis.

Project Lead, Technical Lead and Software Engineer at Infosys Limited (Customer: Allstate, Aetna)

August 2002 — July 2007

Oversaw the development and implementation of various software applications while leading diverse teams and coordinating stakeholder communications.

- Directed a Global Delivery team in creating a new business quoting tool for Allstate® Corporation, managing multiple teams for efficient delivery.
- Facilitated communication among stakeholders, monitored project timelines, and resolved issues to meet key milestones.
- Conducted design reviews, code evaluations, and implemented process improvements to enhance software quality.
- Led the Offshore Development team for Aetna®'s Medical Management System, ensuring effective tracking of patient data.
- Engineered and optimized the Sales Tracking System (STS) for Aetna®, providing a web-based interface for sales personnel.
- Developed components for Aetna® Inc.'s Centralized Overpayment Processing System, achieving high-quality results in a short timeframe.
- Created a System of Record for Northwestern Mutual®, delivering a data management middleware solution with zero defects.

Software Engineer at Computer Associates

July 2000 — August 2002

Focused on creating and designing multiple elements within Computer Associates' product line, utilizing various programming languages and frameworks.

- Engineered the SSO Unix Client for the e-Trust Product Family, improving user authentication processes.
- Designed the E-Catalog Component, enhancing product accessibility and organization.
- Contributed to the E-Commerce Suite based on Jasmine-ii, facilitating online transaction capabilities.
- Developed an XML Wrapper for Jasmine ODBMS, streamlining data management and integration.
- Utilized C and C++ programming languages for efficient software development and optimization.

Paper presenter at Society of Statistics, Computer and Applications (SSCA) (<https://ssca.org.in>), global conference. Jan-2022

SKILLS SUMMARY:

AI Skills:

- **Major Skills:** Expertise in AI, ML, and Analytics, including Agentic AI, Generative AI, Retrieval-Augmented Generation (RAG), Deep Learning (Artificial Neural Network), GPT, Azure OpenAI services, LangChain framework (RAG), Llama Index framework, Azure AI Projects framework for Agentic AI, Responsible AI and guardrails, Large Language Models (LLMs), LLM observability and AI Quality, Transformers, and Multi-modal LLM, and advanced techniques like Chain of Thought, re-ranking of retrieval in RAG, GraphRAG, ReACT and ReWOO Agent reasoning.
- **Minor Skills:** Convolutional Neural Network, Reinforcement Learning (GRPO), Image Processing, Recommendation Systems, Graph Neural Networks (GNN), Knowledge Graphs, Databricks ML, Databricks Mosaic AI, Domino ML, Intelligent Document Processing, Azure Form Recognizer, Pytorch library, Statistics, Explainable AI, and Proof of Concepts (PoC) with LLMs such as Claude, Llama, Gemini, and Deepseek.

Traditional ML Skills:

- **Major Skills:** Ensemble models, Random Forest, XGBoost, Bagging and Boosting, Linear Regression, Performance Tuning (feature engineering and hyperparameter tuning), Clustering, ANN, NLP, Transformers, BERT, transfer learning, Reinforcement Learning, Time-series analysis, H2O.ai, Sparkling Water, Model monitoring, Auto-ML, SPARK ML, KNN, Scikit-learn, Plotly, TensorFlow-Keras library, TensorFlow Hub, TensorFlow Text,
- **Minor Skills:** Knowledge of additional ML techniques such as CNN, GRPO, and advanced AI applications like Intelligent Document Processing and Recommendation Systems.

Programming Skills:

- **Major Skills:** Proficient in Python (various libraries), Py-SPARK, Java-JEE, SQL, Angular, ReactJS, C++, and C.
- **Minor Skills:** Familiarity with Fortran, Shell scripting, NO-SQL, Redis-QL, Jenkins, and Scala.

Database Skills:

- **Major Skills:** Expertise in RDBMS (Oracle, SQL Server, DB2), No-SQL (MongoDB), and Vector Databases (Redis, Milvus, CosmosDB).
- **Minor Skills:** Experience with Cassandra, Druid, Neo4j, ArangoDB, AWS DynamoDB, PineCone.

Middleware Skills:

- **Major Skills:** REST API, Kafka.
- **Minor Skills:** ESB.

Tools and Platforms:

- **Major Skills:** Databricks Lakehouse, FileNet ECM, MPP, Rally, JIRA, Headspin, Sprinklr, GlassBox, Medalia, Tableau, Business Objects, MLflow, and Github Copilot.
- **Minor Skills:** Familiarity with Pega, ELK, Selenium, Appium, and Informatica.

DevOps Skills:

- **Major Skills:** Expertise in OpenShift Kubernetes-Docker, Jenkins, Github, Git CI/CD.
- **Minor Skills:** Knowledge of Sonar Cube.

Cloud Skills:

- **Major Skills:** Proficient in Azure AI Foundry, Azure AI Search, Azure Vision, Azure CosmosDB, Azure Functions, Azure Service Bus, AWS Lambda, S3, EC2, DynamoDB, EMR, EKS, ECS, Sagemaker, Bedrock, Cloud Formation, ML Ops, and ML solutions.
- **Minor Skills:** Familiarity with GCP, Pivotal Cloud Foundry, and IBM Openshift.

Business Domain Skills:

- **Major Skills:** Extensive experience in Healthcare, Insurance, Pharma, Life Science, e-Commerce, and Retail.
- **Minor Skills:** Knowledge of Payments domain.

Methodology Skills:

- **Major Skills:** Proficient in Waterfall, Scrum, Agile-Safe, Kanban, PMP, Micro-service Architecture, Design Patterns, and Security and Compliance.
- **Minor Skills:** Familiarity with Extreme Programming, ITIL, and CMM.

Management Skills:

- **Major Skills:** Partnership with leading products (MS Azure OpenAI, Nvidia, Databricks, etc.), selecting startups in AI and Generative AI, proposals (RFP, RFQ, RFI, SOW), project and program planning, process design and improvements, delivery

KPI, consulting (e.g., Architecture-as-a-Service, Outsourcing options), product evaluation and comparison (e.g., Low-Code strategy, Vector DB comparisons, RAG framework comparison, advanced prompt techniques, and fine-tuning).

- **Minor Skills:** Experience in mentoring, recruiting, writing articles, blogs, papers, and whitepapers, developing solution accelerators, and product management.



EDUCATION:

Post Graduate Program in AI ML, University of Texas, McCombs School of Business

March 2021 — November 2021

B. Tech. (Hons.) in Engineering, Indian Institute of Technology, Kharagpur

July 1996 — May 2000

MEP in Managerial Excellence Program, Duke University - The Fuqua School of Business

2008

PMP in Project Management, Project Management Institution

January 2007 — January 2008

Certified Scrum Master in Project Management, cPrime

January 2015 — January 2015

PDU in Project Management, Internal Institute of Learning

January 2008 — January 2010

Training on Project Management in Information Technology Project Management, Internal Institute of Learning

January 2008 — January 2010

Certifications:

Artificial Intelligence & Machine Learning

- **NVIDIA AI Advisor - Technical Sales** (Issued Jun 2025, Expires Jun 2027)
- **Reinforcement Fine-Tuning LLMs With GRPO** - DeepLearning.AI (Issued May 2025)
- **Azure AI-050: Generative AI Solutions with Azure OpenAI** - Udemy (Issued Mar 2025)
- **Long-Term Agentic Memory With LangGraph** - DeepLearning.AI (Issued Mar 2025)
- **Practical Multi AI Agents and Advanced Use Cases with crewAI!** - DeepLearning.AI (Issued Mar 2025)
- **Get Started with Databricks for Generative AI** - Databricks (Issued Dec 2024)
- **Red Teaming LLM Applications** - DeepLearning.AI (Issued Apr 2024)
- **Reinforcement Learning from Human Feedback** - DeepLearning.AI (Issued Apr 2024)
- **Advanced Retrieval for AI with Chroma** - DeepLearning.AI (Issued Jan 2024)
- **Introduction to Generative AI** - Coursera (Issued Sep 2023)
- **Perform Cloud Data Science with Azure Machine Learning** - Microsoft (Issued Sep 2022)
- **AWS ML** - Amazon (Issued Sep 2020)
- **Machine Learning** - Stanford Online (Issued Feb 2020)

Cybersecurity

- **Cyber Security Intermediate 2025** - Hexaware Technologies (Issued Apr 2025)

Microsoft Copilot Certifications

- **Get Started with Microsoft Copilot Studio** (Issued Feb 2025)
- **Challenge Project - Microsoft Copilot for Prototyping and MVP Creation** (Issued Apr 2024)
- **Examine the Copilot for Microsoft CoPilot Design** (Issued Apr 2024)
- **Implement Copilot for Microsoft** (Issued Apr 2024)
- **Prepare for Copilot for Microsoft 365: Part 1 - Design and Prerequisites** (Issued Apr 2024)

Microsoft Form Recognizer Certifications

- **Create a Composed Form Recognizer Model** (Issued Sep 2022)
- **Extract Data from Forms with Form Recognizer** (Issued Sep 2022)
- **Plan a Form Recognizer Solution** (Issued Sep 2022)
- **Use Prebuilt Form Recognizer Models** (Issued Sep 2022)

Quality & Project Management

- **TruEra AI Quality Workshop** - TruEra (Issued Mar 2023)
- **PMP (Project Management Professional)** - PMI (Issued Mar 2008, Expired Mar 2018)
- **Certified Scrum Master** - Scrum Alliance (Issued Jan 2015, Expired Jan 2017)

Other Certifications:

- **INS 21** – Insurance Business, 2007
- **Java 4** – Brainbench, 2007
- **LOMA 280** – Life Insurance, 2012