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Top Skills

Data Visualization

Machine Learning

Big Data Analytics

Languages

English

Telugu

Certifications

Blockchain Basics

Creative Insights: Lauren Bacon on
Web Design

Planning a Web Design Portfolio:
Getting a Job

Storytelling for Designers

Creativity Training: Generate Ideas
in Greater Quantity and Quality

Honors-Awards

Mercer Certificate of Excellence

Raghuvamsi Ayapilla

AI/ML Engineer | Data Science Strategist | Agile Leadership
Louisville, Kentucky, United States

Summary

An enthusiastic and experienced AI/ML Engineer with a strong background in data science and a passion for transforming complex business challenges into innovative AI-driven solutions. With a career spanning over a decade, I have honed my skills in data analytics, machine learning, and strategic project management, consistently driving operational excellence and business transformation.

What I Do:

- AI/ML Innovation: Specialize in designing and implementing NLP-based ML models, adept in Python, R, PySpark, and various ML frameworks. My focus is on creating intelligent systems that enhance business intelligence and decision-making processes.
- Agile Leadership: Lead teams in Agile environments, emphasizing efficient project delivery, innovation, and continuous improvement. My leadership style is collaborative, focusing on empowering team members and fostering a culture of learning and growth.
- Strategic Data Analysis: Utilize advanced data analytics and predictive modeling to inform strategic planning and decision-making, enabling organizations to achieve measurable outcomes and unlock new growth opportunities.

My Professional Journey:

- Continuous Learning: Committed to staying at the forefront of AI/ML advancements, continuously enhancing my skillset and contributing to the community through ongoing learning and knowledge sharing.
- Collaborative Spirit: Passionate about working with diverse teams and stakeholders to explore new challenges and opportunities in AI/ML that can drive sustainable business growth.

I am always interested in connecting with like-minded professionals, sharing insights, and exploring potential collaborations in the AI/ML space. Feel free to reach out if you're interested in discussing AI innovations, data science strategies, or leadership in tech!

Experience

Marsh McLennan

3 years 8 months

AI/ML Engineer

December 2023 - Present (5 months)

Louisville, Kentucky, United States

In my role as an AI/ML Engineer at MarshMcLennan, I have been at the forefront of integrating advanced machine learning solutions into our business processes. I spearheaded the 'Streamline ML' project, implementing an end-to-end MLOps strategy to enhance team efficiency and model deployment, including the development of an MLOps strategy for a recommendation system for Knowledge Base articles in ServiceNow, utilizing MLflow for experiment tracking and GitHub Actions for CI/CD.

Currently, I am leading the 'Ticket Analysis AI' initiative, analyzing a vast array of support ticket data to identify critical patterns and trends, involving eight diverse machine learning use cases ranging from Frequency and Severity Analysis to Emerging Issues Identification.

Tags Prediction from unstructured Data: Recently embarked on the "Tags Prediction" project, leveraging over 3 million ServiceNow ticket records to refine tag prediction processes. This challenge involved creating a sophisticated framework encompassing business objective definition, ML task conversion, iterative solution ideation with my team, and spearheading the deployment into production. Noteworthy achievements include innovating with NLP techniques, few-shot learning via OpenAI's API, and ultimately, succeeding with a novel ML+AI hybrid approach using LangChain for strategic tag prediction, underscoring my commitment to continuous learning and innovation, particularly in exploring scalable cloud-based ML solutions like AWS SageMaker.

This role blends my expertise in data science and machine learning with a passion for agile project management. I actively collaborate with cross-functional teams, significantly contributing to strategic decisions through data-driven insights.

Senior Business Analyst

September 2020 - January 2024 (3 years 5 months)

Louisville, Kentucky, United States

Oversee requirements engineering (RE) for complex and concurrent projects within a diverse portfolio, managing strategic product features and enhancement prioritizations by focusing on improved user experience. Manage the development, conception, and implementation of new relational or multi-dimensional databases. Collaborate across organizational vertices to deliver key stakeholders data-informed insights that strengthen business planning. Subject matter expert in data visualization tools with a keen ability to present data in clear language.

- Developed machine learning in Python Pandas for improved analysis and prediction, significantly improving teamwide service-level agreement (SLA) performance within Product Support
- Conceptualized natural language processing (NLP) based machine learning models in Python NLTK, researching and designing a Logistic Regression algorithm through scikit-learn libraries to support ticket trends
- Spearheaded JAD (Joint Application Development) sessions with 10+ business teams of HBB (Health Benefits Broker) products within APAC, EMEA, and North America regions
- Synthesized weekly reports to C-Suite leaders on product usage statistics and predictions, directly supporting the onboarding of 34 countries onto the HBB application
- Supported the department through a successful company-wide audit in 2020; devised a rigorous follow-up system, performed documentation due diligence, and implemented an end-to-end workflow
- Developed tools and programs that galvanized continuous improvement at the enterprise and operational level:
 - o HBB: a tool for managing all health benefits internationally across 34 countries; created dashboards and trained the team to deliver on commitments in two-week sprints
 - o Belong: company portal for managing health, wealth, rewards, career, and benefits; created client-specific portals from ideation to execution
 - o HR Operations Scanner: a data-backed tool to aid HR in change management initiatives

Mercer

Lead Business Systems Analyst

June 2010 - September 2020 (10 years 4 months)

Louisville, Kentucky Area

Served as a Scrum Master Business Analyst throughout all phases of release planning and execution strategy. Collaborated on product vision and high-level

product backlogs, conducting meetings and supporting the business owners on release prioritization strategy and acceptance criteria. Supported research and development initiatives of core strategies for tools. Utilized data to create Use Case Diagrams, Activity Diagrams, and Sequence Diagrams.

- Developed screen mockups and low fidelity diagrams to generate requirements using Balsamiq mockup software, resulting in bolstered communication workflows and increased overall efficiency
- Transformed ideation and requirements confirmation processes by creating an interactive prototype using prototyping tools, such as Creative Cloud and Sketch, to aid in product owner validation
- Organized and consolidated training data to produce system flow charts that maximized overall comprehension of wireframes creation, significantly reducing completion time
- Built Excel trackers that promoted a culture of continuous improvement, such as departmental workflows tracker and sprint impediments tracker using historical data
- Planned and conceptualized multiple documents, including workflow documentation, user manuals, feedback documents, online help registers, and Strategic Staffing Tool how-to guides
- Planned, executed, and oversaw the implementation of various tools, strategizing successful delivery at scale:
 - o Global Database Disclosure: web-based platform and eventual desktop application used to capture analyzed data from company filings; developed user stories that maximized output with clear deliverables across 25 sprints
 - o Strategic Staffing Tool: a tool to efficiently align human capital with projects based on knowledge criteria
 - o Allegro: survey builder tool to aid in understanding the needs of employees
 - o Balance Sheet Calculator: HR tracking tool for expat compensation across assignments and locations

CS STARS

Business Systems Analyst

August 2008 - February 2010 (1 year 7 months)

Chicago

Served as primary business systems analyst for web-based claims management and medical bill

review applications; applications developed by one of the world's leading providers of risk, property, and casualty information management as well as claims automation and reporting solutions for corporations and carriers.

- Conducted business elicitation meetings with project stakeholders
- Created vision and scope documents to identify and document high-level requirements and analyze initial project parameters
- Implemented CS STARS's proprietary 14-step Custom Solution Group methodology to facilitate projects from inception to completion
- Participated in development of a custom automated web-based tool based on client's specific requirements
- Created and managed project artifacts and templates including use cases, requirement types, and traceability relationships in JIRA and Confluence

Humana

Business Systems Analyst

August 2008 - January 2009 (6 months)

Gathered requirements and created documentation for Humana's migration of data in Provision

Model. Ensured seamless migration from MS Access in VB Script to Oracle 11i.

- Worked with technical staff as single point of contact to understand and document all queries from twenty-five databases that required migration
- Reviewed existing business process documentation to ensure that new requirements were aligned
- Developed all necessary user manuals
- Created workflow diagrams and flowcharts to assist developers in understanding dataflows.
- Devised and managed project artifacts and templates including use cases, requirement types and traceability relationships in JIRA and Confluence
- Acted as primary liaison to the business users and Finance department to answer code-related questions and convey answers to IT

Education

University of Louisville

Master of Science - MS, Computer Science · (2020 - 2022)

Lamar University

Master of Science - MS, Computer Science · (January 2007 - January 2009)

Jawaharlal Nehru Technological University

Bachelor of Technology, Electrical and Electronics Engineering · (2002 - 2006)

