

KarthEEK Yakkala

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Education

Master's in Computer Science

University of Central Missouri

Aug 2023 - May 2025

Relevant Coursework: Advance Algorithms, Artificial Intelligence, Cloud Computing

GPA : 3.66

Bachelor of Technology, Electronics and Communications Engineering

Jawaharlal Nehru Technological University

Aug 2017 - July 2021

Relevant Coursework: Operating systems, Computer Networks, Digital Image Processing

GPA : 3.77

Skills

Programming Languages : Python, Java, SQL, R, Shell Scripting

Database Management : MongoDB, MySQL

Technologies : Natural Language Processing(NLP), Large Language Models, Machine Learning

DevOps : Continuous Integration, Continuous Deployment, Docker, Kubernetes, Helm charts,Jenkins

Frameworks : PyTorch, LangChain, React

Work Experience

Tata Consultancy Services(TCS)

Machine Learning Operations (MLOps) Engineer

Jul 2021- Aug 2023

Client: Albert Heijn

- Worked on building end-to-end ML model that automatically resolves 30% of incidents raised in ServiceNow, reducing their manual resolution time by over 95%. Technologies : Python, Machine Learning.
- Used github as version control system for code development.
- Performed exploratory data analysis. Technologies: Pandas, Numpy.
- Achieved an 95% accuracy rate in incident prediction by applying Random Forest and Support Vector Machine algorithms.
- Integrated MongoDB database with ML application using Pymongo to manage and store 10,000+ tickets.
- Migrated on-premises ML application to Azure cloud, which resulted in 20% reduction of infrastructure cost. Technologies used: Docker, Kubernetes, Azure DevOps.
- Deployed Monolithic ML application as separate modules using microservices architecture and containerisation.
- Implemented Continuous Integration and Continuous Deployment processes, which increased deployment speed and efficiency by 30% .
- Worked in agile and collaborated with cross-functional teams to research, identify, and analyze solutions.
- Used Jira for agile project management, tracking and prioritizing tasks, and Confluence for documentation.
- Worked on Chatbot using Rasa framework for the users to create, update, view tickets in ServiceNow.
- Used NLP models like Spacy and BERT in development for precise user query understanding.

Cognizant Technology Solutions

Programmer Analyst Trainee (Intern)

Feb 2021- Jun 2021

- Worked on development of an application using HTML, CSS, JavaScript.
- Worked on building Bus reservation application using React.

Projects

Chat with your docs Developed a LLM and Gen AI powered context aware Application, that uses provided knowledge base as context. [Repository](#)

Open-source contributions

LangChain: Contributed to the development and documentation of largest LLM and Generative AI framework. [Repository](#), [Commits](#)

LLamaIndex: Contributed to the documentation of Gen AI framework. [Repository](#), [Commits](#)

PandasAI: Contributed to the development of LLM project. [Repository](#), [Commits](#)

Achievements and activities

- Received **On The Spot** award from TCS for making architect changes to decommission few servers and migrate them to azure cloud, resulted in a 40% reduction in project budget.
- Wrote blogs on Large Language Models and Generative AI applications. ([Link](#))
- Received Merit Certificate from Government of India for scoring a perfect GPA of 10 in 10th grade.

Certifications

- Microsoft Certified: DevOps Engineer Expert (AZ-400). [Certificate](#)
- Microsoft Certified: Azure Administrator Associate (AZ-104). [Certificate](#)
- Microsoft Certified: Azure Fundamentals (AZ-900). [Certificate](#)

Interests and hobbies

- Trends in large language models and artificial intelligence, monitoring financial markets.