

Deepa Shree Chickballapur Venkatachalapathi

+91-914-882-2926 | deepachalapathi17@gmail.com | [linkedin.com/in/deepa-cv](https://www.linkedin.com/in/deepa-cv) | github.io/deepa-cv/home

EDUCATION

University of Wisconsin-Madison

Master of Science in Data Science

Madison, WI

Dec 2025

- **Coursework:** Statistics, Machine Learning, Natural Language Processing, Database Topics, Optimization

PES University

Bachelor of Technology in Computer Science and Engineering

Bengaluru, India

May 2023

- **Coursework:** Database Management, Data Structures and Algorithms, Cloud Computing, Big Data, Software Engineering
- **GPA:** 9.24/10.00; **Awards:** Prof. MRD Scholarship; **Organizations:** Apostrophe, Newolf Society, C.O.D.S

TECHNICAL SKILLS

Programming Languages: Python, JavaScript (*Proficient*) ; Java, C/C++ (*Intermediate*) ; R, Golang (*Moderate*)

Data Management and Analysis: PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, Tabelau, PowerBI, Pyspark, Hadoop, Kafka

Machine Learning : Tensorflow, Keras, Pytorch, HuggingFace, NLTK, scikit-learn, pandas, numpy

Cloud and Development Tools: Docker, Kubernetes, AWS, PySpark, React.js, Yarn, Streamlit, Flask, Git

EXPERIENCE

Cloud Developer - I

Hewlett Packard Enterprise

Aug 2023 – Aug 2024

Bengaluru, India

- **Reduced database fetch time by 80%** along with cache optimization using Python, PostgreSQL and Redis.
- **User Interface and Monitoring Dashboards** development using React.js, Grafana and Humio.
- **Latency reduction by 90%** for unknown error logging by automation using Github Workflow.
- **Increased code coverage over 85%** by introducing test cases using pytest, unittest.
- **Metadata retrieval framework** using natural language queries for CMF (MLOps library by HPE) using Pytorch, along with the innovation team.

Research and Development Intern

Hewlett Packard Enterprise

Jan 2023 – July 2023

Bengaluru, India

- **Improved deploy speed by 70%** by automating regression testing using JUnit and Jenkins.
- **Reduced triage time by 80%** by introducing streaming log parser for gigabyte sized files on SFTP servers using Python and NLP techniques.

Technical Consultant Intern

Adobe Systems

May 2022 – Aug 2022

Bengaluru, India

- ML pipeline for customer propensity to purchase with over **90% prediction accuracy** using sklearn and MLOps practices.
- **Visualization dashboards** for enhanced user engagement using MySQL and PowerBI.
- **Led development** of the interns' project showcase portal as one of the three **project managers**.

PROJECTS

Catalog Indexing Engine | Python, Kafka, Elasticsearch, Tensorflow, PostgreSQL, Docker, Flask

Dec 2023 – Feb 2024

- Containerized application that supports structured and unstructured queries to retrieve data and ensure product relevancy in results for fashion catalogs.
- Streaming, Re-Indexing and Incremental Training performed at scheduled intervals to accommodate new data.

Crime Data Analysis | Python, Pyspark, sklearn, MLlib

Sept 2021 – Nov 2021

- Performed clustering and classification on large scale San Fransico Crime data.
- Employed incremental learning on 39 different classes and set up data streaming using Pyspark.

Student Attrition Prevention | Python, sklearn, matplotlib, pandas, numpy

Sept 2021 – Nov 2021

- Developed ensemble models to predict assessment marks in online courses to identify at-risk students by integrating various data sources from Open University's data.

PUBLICATIONS

1. Prediction of Code Runtime Complexity using Machine Learning Techniques – *ERCICA, 2023 (View here)*
2. Data-Efficient Training for Effective Paraphrase Retrieval Techniques Using Language Models to Identify Research Gaps – *CML, 2024 (Presented)*

EXTRA-CURRICULARS

- **Rewriting the Code, July 2024 – Present** – Engage in discussions and events along with fellow women interested in technology.
- **HPE Gives, Feb 2023 – Aug 2024** – Volunteer tutor for rural kids and part of restoration and environmental drives.
- **AI Gaming Event, Microsoft Student Partner, May 2020** – Used Microsoft Azure Computer Vision API to power bots. Placed 1st amongst 61 participants.