SHREYAS DEVARAJ

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EDUCATION

North Carolina State University, Raleigh, NC — August 2024 - May 2026
Master of Computer Science — 4.0/4.0
Courses: *Artificial Intelligence, NLP, Automated Learning and Data Analysis, Applied AI in Industry, Design and Analysis of Algorithms, Software Engineering*

PES University, Bangalore, India — August 2019 - May 2023
Bachelor of Technology in Computer Science and Engineering
Courses: *Machine Learning, Cloud Computing, Data Structures and Advanced Algorithms, Web Technologies, Information Retrieval, Computer Networks, Web Security*

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C, C++, ABAP
- **AI & Frameworks:** Langchain, LangGraph, TensorFlow, Scikit-learn, SpaCy, PyTorch, Matplotlib
- **Frontend & Backend:** React, JavaScript, NodeJS, TypeScript, RESTful API, FastAPI, Flask
- **Tools:** Git, Docker, Kubernetes, Visual Studio, Eclipse, Jenkins
- **Cloud and Database:** AWS, MySQL, PostgreSQL, MongoDB, Kùzu Graph DB

WORK EXPERIENCE

CodeCargo – Raleigh, NC
Software Engineering Intern — July 2025 - Present
- Designed and implemented **LLM agents** with LangGraph.JS for code dependency detection and GitHub Actions workflow analysis
- Built and shipped modular UI features for CodeCargo's developer portal using **React** and **Next.js,** with **Tailwind**
- Integrated **Kùzu Graph DB** for modeling and querying service graphs, supporting **clustering models** on services for grouping

SAP – Bangalore, India
Software Developer, MDI — July 2023 - July 2024
- Designed, developed and deployed microservice features for the SAP Master Data Integration Cloud Service **ABAP Client**
- Created Fiori applications using **ABAP RAP** for CRUD operations and generated API documentation with **Swagger**
- Built custom **T-codes** for SAP GUI to be able to perform class actions for the Pull and Push model on MDI object instances
- Conducted performance tests on 100k instances, removed bottlenecks to improve ABAP app performance

SAP – Bangalore, India
SAP iXp Intern — January 2023 - July 2023
- Automated CDS object deployment with shell scripts, cutting manual deployment effort by **3 hours** per instance
- Improved backend workflows and REST API integration for scalable MDI object operations
- Wrote comprehensive unit tests with 100% code coverage and updated existing functionality in ReasonML for MDI object instances
- Built a metaverse game on Unity at SAP d-shop, presenting at SAP d-com engaging 100+ participants with topics on GenAI

PROJECTS

Eventflow.ai – Agentic Application
- Developed an agentic assistant using **LangGraph**, and **Llama** to automate task generation via multi-agent reasoning
- Delivered full-stack architecture with a **FastAPI** backend and **TypeScript** frontend (**CopilotKit**) for interactive agent collaboration
- Designed an interactive chat that interprets event context and generates executable tasks using LLM-powered reasoning

Question Answering System using Knowledge Graphs
- Integrated Knowledge Graph reasoning into a Python **NLP** model (spaCy, NLTK) to answer multi-hop questions in a knowledge base
- Utilized entity-pair extraction and part-of-speech tagging techniques to improve accuracy, achieving **80.13%** on multi-hop questions and **outperforming BERT** on SQuAD and Multi-RC datasets
- Published results in **IEEE Xplore** - https://ieeexplore.ieee.org/document/10134047

d-shop Assistant
- Built a **LangChain** and **RAG** assistant for SAP d-shop internal wiki and tooling, integrated with Teams, GitHub, and Outlook
- Leveraged prompt engineering and task orchestration to deliver context-aware responses and **cut** manual query handling by **60%**
- Designed a **Unity**-based metaverse game for SAP d-shop, presented at SAP d-com to 100+ participants, gamifying onboarding topics including GenAI and internal tools

BioInsight - Biomanufacturing Analytics Platform
- Developed an end-to-end analytics platform in Python to process and model biolector data from 1mL and 30L scale experiments
- Implemented **ML pipelines** with scikit-learn and **TensorFlow** for KPI prediction, **LSTM**-based time series forecasting, and Isolation Forest anomaly detection
- Created interactive visualizations and model comparison modules for anomaly detection, deployed via **Streamlit**

ACHIEVEMENTS

- **VenturePack Challenge:** Awarded **$3500 prize** for building and presenting Eventflow.ai, an agentic event planning platform
- **Hack_NCState**: **Winner** of the flagship hackathon among 60+ teams with a full-stack and VR project on gamified financial literacy
- **Community of Data Science, Head of Natural Language Processing**: Led and mentored the NLP division, organizing hackathons and technical events for over 300 participants