# **DEEPTIKA KANNAN**

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# **Professional Summary**

Results-driven Software Engineer with expertise in full-stack development, cloud infrastructure, and data engineering. Proficient in developing scalable applications using Java, Python, React, and Next.js. Experienced in implementing microservices architecture, optimizing application performance, and enhancing security protocols. Demonstrated success in delivering efficient solutions that improve user experience and system reliability across diverse technical environments.

# Work Experience

## **KIOWA CORPORATION**

#### Software Developer

San Jose, CA

- Developed and maintained React and Next.js applications, implementing responsive UI components that improved user experience and reduced manual effort by 40%
- Built RESTful APIs and integrated frontend components with backend services to enable dynamic search filters and real-time notifications
- Resolved critical application issues including hydration errors and performance bottlenecks, implementing optimized rendering techniques for cross-browser compatibility
- Maintained cloud-based data infrastructure on AWS and Azure for largescale data storage and model hosting

## **UF DATA STUDIOS**

#### **Research Assistant**

Gainesville, FL

- Designed and implemented scalable ETL pipelines using Python, processing over 180,000 data points while ensuring data integrity and system performance
- Engineered concurrent data collection systems using multithreading and parallel processing to efficiently mine real-time data across multiple sources
- Developed a modular Python application for automated data ingestion, implementing efficient algorithms that achieved 92% accuracy in classification tasks

## NAVIS SOFTWARE INDIA PVT LTD

#### Software Engineer

Chennai, India

- Constructed a Kafka-based platform for data management across the application ecosystem, resulting in a 30% increase in efficiency
- Developed and deployed microservices using Java Spring Boot, implementing containerization with Docker and CI/CD pipelines through Jenkins for continuous delivery
- Implemented secure authentication and authorization mechanisms using OAuth and SAML protocols, enhancing system security while maintaining compliance requirements

# Education

# University of Florida, GPA: 3.76

**Master of Science in Computer Science** 

# **B.Tech. Information and Communication Technology**

SASTRA University, GPA: 8.72/10

# Technical Skills

# August 2024 - December 2024

March 2025 - Present

#### February 2021 - December 2022

June 2021

December 2024

Languages: Java, Python, JavaScript/TypeScript, C++, SQL Frameworks & Libraries: Spring Boot, React, Next.js, Angular, Flask, Django DevOps & Cloud: Docker, Jenkins, AWS, GCP, CI/CD pipelines, Linux Data & Integration: Kafka, REST APIs, PostgreSQL, MySQL, ETL pipelines, NoSQL (Cassandra) Tools & Methodologies: Git, Agile, JUnit, Maven, Gradle, Microservices architecture

# Projects

# **GENERALIZED MULTI-DOMAIN NAMED ENTITY RECOGNITION**

Large Language Models/NLP/Python

- Designed and implemented a scalable NLP pipeline for processing 50k multi-domain text samples, optimizing for memory efficiency and processing speed
- Engineered model evaluation framework to benchmark performance of various LLM architectures, achieving 70.6% F1 score with the optimal configuration

## **INTERNET CENSORSHIP DETECTION**

Cybersecurity/Machine Learning/Python

• Developed a Python application utilizing unsupervised learning algorithms to detect patterns in web censorship, implementing efficient data processing techniques for large-scale analysis

#### **COVID-19 PANDEMIC PROGRESSION ANALYSIS**

Machine Learning/Regression/Python

• Built and optimized machine learning models (Random Forest, XGBoost, SVM) with custom feature engineering, implementing cross-validation techniques to ensure model reliability and generalizability