Kirthik Raja

Leiden, The Netherlands
Contact No: +31-616175805;
E-mail: kirthikraja200@gmail.com
https://github.com/Kirthikraja
https://linkedin.com/in/kirthik-raja

SUMMARY

I am a data science student with hands-on experience in machine learning, artificial intelligence, and data analysis. With a strong foundation in Python, I've also developed full-stack applications using React, Java, and Spring Boot. My background combines software engineering and AI to build intelligent, scalable solutions. Currently pursuing a master's in Data Science, I'm eager to apply my skills to real-world challenges and innovative projects.

ACADEMIC QUALIFICATION

Master's in Computer Science: Data Science, Universiteit Leiden, Leiden, The Netherlands.   **2025-2027**
Bachelor of Technology in Computer Science and Engineering, Amrita Vishwa Vidyapeetham, Coimbatore, India
CGPA: 6.82/10   **2018-2022**

WORK EXPERIENCE

Software Engineer (SE-1), Honeywell Technology Solutions, Bengaluru, India   **August 2022–August 2025**

- Developed backend solutions using Java and Spring Boot, and performed unit testing with Mockito to meet project requirements. Building, maintaining, and revamping robust and scalable web-based applications along with data extraction and workflow automation.
- Full Stack Developer working on the creation of dashboards, APIs, database management, and server-side scripts
- Utilized Azure tools, including Function App and Event Hubs.
- Delivered product features on time, ensuring timely releases to customers.
- Directly interacted with customers to understand their requirements and provided timely bug fixes.
- Developed and maintained software in multiple programming languages, such as Java, and JavaScript

PROFESSIONAL PROJECTS

Industry: Data Enrichment Services(DES)   **August 2022–August 2025**
Objective: Normalizing and processing large-scale customer and telemetry data, then storing it in both cloud storage and databases.

- Engaged in developing and upkeep applications using cloud-native technologies such as Angular, Spring Boot, and Node.js, following a microservices architecture.
- Worked on developing new APIs to fetch Honeywell telemetry data from sensors, improving real-time monitoring and integration with existing systems.
- Understanding and improving existing complex workflows to enhance reliability along with the introduction of automated error detection for these workflows
- Integrated real-time data streaming with Apache Spark, processing via Kafka, significantly improved data accuracy. This helped further in reducing the decision-making time, enabling the company to respond 50% faster to operational demands and market change. It thereby increased overall operational efficiency by 25%, which again delivered more informed decisions and quicker reaction to emerging trends.
- Ensuring consistent, efficient management and access for analysis and decision-making.

PROFESSIONAL PROJECTS

Industry: Asset Performance Management(APM)   **August 2022–August 2025**
Objective: Delivering solutions by developing new products tailored to meet diverse customer needs.

- Developed new frontend applications for Shell and Chevron to maintain their oil management systems, enhancing operational efficiency and user experience.
- Delivered rapid bug fixes and resolved a critical outage affecting Home Depot's warehouses in the US, cutting downtime by 60% and reducing the average resolution time from 12 hours to just 4. This swift intervention minimized operational disruptions, restored full service 50% faster than usual, and decreased lost productivity by 35%, leading to a 40% improvement in overall operational efficiency.
- Secured new business from Chevron as a result of the improved efficiency of the newly developed frontend analytics application.
- Implemented multilingual support in the User Interface to increase accessibility and cater to a broader range of users.

INTERNSHIP
Intern – Software Development, Honeywell Technology Solutions, India January–August 2022
- Developed a new software application with a customizable dashboard that allows users to monitor real-time performance metrics, alerts, and status reports. This central interface provides a detailed view of digital asset health and performance, enabling users to detect and resolve issues in under 15 minutes, compared to the previous average of 30 minutes. This improvement has significantly enhanced operational oversight and streamlined asset management.
- Developed UI from scratch to implement team requirements using React, Typescript, HTML, and CSS.
- Ensured timely delivery of the product to the team.
- Successfully deployed the project for internal use, ensuring seamless accessibility and functionality for all stakeholders
- Acquired experience in server scripting and maintenance, and application lifecycle management like design, maintenance, hosting, deployment, and pipeline creation.

ACADEMIC PROJECT
Title Hybrid Recommender System Kaggle Challenge, Universiteit Leiden ([GitHub](#))
Duration: May 2025 – June 2025
Objective: To develop and a Recommendation model by combining collaborative filtering, sequential co-occurrence patterns, content-based, and popularity-based models and get the highest possible Recall score.
Team Size: 3
Key Role: Led the entire development cycle of the system, including brainstorming, design, and execution phases.

ACADEMIC PROJECT
Title: CartPole Deep Reinforcement Learning ([GitHub](#))
Duration: August 2021 – January 2022
Objective: Developed a machine learning-based weather prediction model using extensive datasets, showcasing skills in data analysis, model development, and real-world application of predictive analytics.
Team Size: 3
Key Role: Implemented multiple RL algorithms in CartPole, collaborated with the team to devise technical solutions, and produced status reports on operational tasks. Provided support for daily activities and assisted colleagues with various tasks

TECHNICAL SKILLS
Tools and Technologies: Java, JavaScript, ReactJS, AngularJS, Python, Machine Learning and with Python,SpringBoot, NodeJS, SQL, MongoDB, Spark, Scala, Kafka, Azure DevOps