Rohit Krishnan

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RedTech Recruitment Ltd   March 01, 2024

Dear Mr. Bull,

I am writing to express my interest in the Application Software Engineer - JavaScript position advertised on Milkround, with reference ID: ASER01. As a dedicated AI/ML Engineer with a strong foundation in JavaScript, Node.js, and a passion for web technologies, I am excited about the opportunity to contribute to the team.

During my tenure as a Senior Software Engineer at Tiatech Health Technologies and a Part-Time Research Assistant at the University of Cambridge, I honed my skills in JavaScript, Node.js, and various other web technologies. I spearheaded projects that enhanced product UI/UX and implemented innovative solutions in digital manufacturing, showcasing my ability to rapidly adapt to new technologies and frameworks. My academic pursuits, including an MSc in Artificial Intelligence from the University of Surrey, have equipped me with a deep understanding of the technical aspects and ethical considerations in AI applications, further enriching my software development skills.

I am particularly drawn to this role because of its focus on using a diverse toolset to work on web application infrastructure projects. My experience in developing, deploying, and maintaining web application infrastructure, along with my proactive approach to learning and adaptability, aligns perfectly with the responsibilities outlined for this position. I am eager to bring my background in both AI/ML and web development to your team, contributing to innovative solutions and the continuous improvement of your web applications.

I am enthusiastic about the opportunity to discuss how my education, skills, and experiences align with the needs of your team. I am looking forward to the possibility of contributing to your projects as an Application Software Engineer and am available at your convenience for an interview.

Thank you for considering my application. I am looking forward to the opportunity to discuss my application in further detail.

Sincerely,

Rohit Krishnan

Attached: curriculum vitæ

Rohit Krishnan

Software Engineer

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Profile

A dedicated and dynamic Software Engineer, I am currently enriching my expertise through an MSc in Artificial Intelligence at the University of Surrey. My academic and professional journey is marked by a strong commitment to tackling complex challenges and delivering innovative solutions. Specialized in various web-technologies and AI, I excel in not only grasping new technologies rapidly but also in applying them effectively in project environments.

My collaborative spirit stands out as I enjoy contributing to team efforts and continuously seek avenues for skill enhancement. This blend of technical prowess, proactive approach to learning and adaptability positions me uniquely for roles that require both the depth and breadth in Web Development and AI.

Experience

Oct 2023 – Present — **Part-Time Research Assistant**, *University of Cambridge*, UK
- Contributing to innovative projects in Digital Manufacturing & Infrastructure Digital Twins
- Demonstrated ability to combine theoretical knowledge with hands-on experience.
- Key contributions:
  - Developed a sample tracking solution for a histopathology lab, addressing the challenge of enhancing label visibility in images through preprocessing with OpenCV. Employed fine-tuned and pre-trained CNN models (YOLOv8) to extract precise bounding boxes around sample labels, and applied OCR (Optical Character Recognition) to extract vital sample information from these labels, streamlining the sample tracking process.
  - Optimized and containerized machine learning models (using Kubernetes, Docker and Python), enabling their efficient deployment on Raspberry Pi microcontrollers.
  - Maintained a React-based javascript frontend that effectively visualizes the digital twin of a hospital for enhanced operational insight and management.

May 2022 – Jul 2023 — **Senior Software Engineer**, *Tiatech Health Technologies*, India
- Commenced my career journey at Tiatech as a Software Engineering Trainee, demonstrating exceptional skills and dedication by transforming "TiaImage", a radiology image viewer, impressing both company stakeholders and clients with the enhanced product UI/UX which resulted in a rapid promotion to Senior Software Engineer within just 3 months.
- I was assigned to a dynamic 5-member team in the development of microservices (Node.js/Javascript and Python), widely adopted by more than 30 hospitals for DICOM imaging and analysis, as well as teleconferencing solutions for collaborative consultations over the internet.
- Conducted thorough research and implemented necessary modifications to ensure compliance with ONC certification for US markets, effectively meeting the stringent g10 and c1 certification criteria, further solidifying the company's commitment to quality and regulatory standards.

July 2019 – August 2019 — **Summer Intern**, *Jaldee Soft Pvt Ltd*, India
- Successfully completed a Summer Internship at Jaldee Soft Pvt Ltd, where I played a pivotal role in developing well-tested services for an Angular javascript frontend to communicate with a Java Spring Boot backend.
- Worked collaboratively with the team, utilizing Agile methodologies with Jira for efficient project management, and embraced Test-Driven Development (TDD) principles to ensure code quality and maintainability.
- Gained invaluable hands-on experience early in my career, enhancing my software development skills and contributing to real-world projects.

Education

2023–Present **MSc Artificial Intelligence**, *University of Surrey*, Guildford
- ○ Specialization in Computer Vision, Deep Learning and Natural Language Processing
- ○ Gained a robust understanding of machine learning fundamentals and the importance of ethical considerations in AI applications

2018–2022 **Bachelor of Technology in Computer Science**, *Neusoft Institute of Technology*, Guangdong
- ○ Achieved a high GPA of 3.94, reflecting consistent dedication to my studies. Recognized as one of the top performers in my batch, evidencing my strong commitment to excellence in the field of computer science.
- ○ Bachelor thesis on a serverless e-commerce platform to evaluate how small-scale businesses can maintain cost-effective online operations.
- ○ Excelled in key courses such as:
  - Fundamentals of Programming (Java): Scored 100/100
  - Data Structures and Algorithms: Scored 92/100

Projects

Title **Knife classification in real-world images**

Description Designed a custom convolutional neural network and studied the impact of various hyper-parameters on a fine-grained classification problem as part of my coursework for my masters at University of Surrey.

Title **Digital Manufacturing on a Shoestring**

Description Hands-on experience at the University of Cambridge, where I participated in successfully deploying modularized components of the Shoestring architecture, showcasing expertise in Kuberenetes, Docker and Python scripting for streamlined and low-cost digital manufacturing implementations.

Title **Infrastructure Digital Twins**

Description Implemented sample tracking solutions for a histopathology lab as a research assistant at the University of Cambridge by leveraging computer vision and machine learning techniques, enhancing efficiency and accuracy in sample management.

Skills

Languages JavaScript/TS, Python, PHP, Java, Rust, C, Scala

Frameworks NextJS (React.js framework), Angular, VueJS, Laravel, FastAPI, Spring boot, PyTorch, Scikit-learn, React Native, Django, PySide (QT Framework), JavaFX, OpenGL, ESP-IDF

μ Controllers ESP32-S2 and later, RP2040, nRF54, STM32 series

Databases PostgreSQL, MongoDB, DynamoDB, Redis, InfluxDB, MySQL

Cloud/Tools AWS, GCP, Figma, Docker, Kubernetes, Git/Gitlab (automation and versioning), JIRA

Soft-skills Hardworking, Excellent Communication skills, Positive and ready-to-learn mindset

Honor and Awards

2022 Excellent Graduate Award for academic and athletics performance during my bachelors.

2018 Ranked first in 12th Grade Computer Science 98%

2017 Voted as the School Agni House Captain. Played a major role in orchestrating team activities and fostering a competitive and collaborative environment among students.

2016 Ranked first in 10th Grade Computer Science 99% and French

Languages

English: Native or Bilingual proficiency **Hindi:** Native or Bilingual proficiency
Japanese: Beginner proficiency **Mandarin:** Beginner proficiency