

Mohammed Rishin Poolat

+44 7917286771 [✉ mohammedrishinpoolat@gmail.com](mailto:mohammedrishinpoolat@gmail.com) [in LinkedIn](#) [GitHub](#) [Portfolio](#)

Education

| | |
|--|--|
| University of Leicester <i>Master of Science in Advanced Computer Science</i> | Jan 2024 - May 2025 Leicester, United Kingdom |
| APJ Abdul Kalam Technological University <i>Bachelor of Technology in Computer Science and Engineering</i> | July 2019 - Jun 2023 Kerala, India |

Experience

| | |
|---|--------------------------------------|
| Qburst <i>Software Engineer</i> | Jul 2023 – Dec 2023 Kerala, India |
| <ul style="list-style-type: none">Led the development of a high-impact CMS project, built robust REST API using Node.js, saving 25% in development time and achieving 98% API uptime through automated CI/CD pipelines and secure Docker containerization.Established a secure, scalable file upload system with AWS S3 and EC2, enhancing user content management, reducing storage costs by 30%, and improving reliability through automated backup and failover mechanisms.Acquired a high-performance culture through agile scrum team collaboration, data security, documentation, and networking. Resulted in a 40% boost in team efficiency and delivered tasks with a 95% completion rate on GitLab.Enhanced real-time communication using Socket.io, minimizing latency by 70% and implemented optimizations within a PostgreSQL database, resulting in a 30% reduction in database resource consumption. | |

Hackathons

| | |
|--|--|
| IBM CIC Hackathon: Finalist <i>Project: Wise Wallet</i> | Innovation Squad Member Live |
| <ul style="list-style-type: none">Designed and engineered an innovative receipt analysis application that extracts text from user-uploaded receipts using OCR technology, leveraging a fine-tuned AI model to provide personalized suggestions and feedback.Improved chatbot response accuracy by 20% with Firebase Cloud Firestore and Firestore Security Rules.Collaborated with a team of developers and designers to create a functional prototype under the mentorship of IBM senior engineers, acquiring a position in the top five among 20 groups. | |

Certifications

| | |
|---|-------------------------------|
| AWS Certified Cloud Practitioner <i>Amazon Web Services (AWS)</i> | <i>Issued: September 2024</i> |
|---|-------------------------------|

Projects

| | |
|---|-----------------------------|
| Penply <i>TypeScript, Next.js, TailwindCSS, Node.js, Express.js, AWS(EC2, DynamoDB, RDS, S3)</i> | Live |
| <ul style="list-style-type: none">Developed a collaborative virtual study room application using React.js, Next.js Node.js, Express.js, and Socket.io offering a smooth user experience with real-time note sharing, file sharing, event management, and chat.Implemented a microservices architecture across three distinct applications, facilitating scalability and maintainability, and utilized Docker for containerization, ensuring consistent development and deployment.Leveraged AWS services including EC2, DynamoDB, RDS(Relational Database Services), and S3 for a complete, high-availability, and performant cloud-based deployment. | |
| Realtime Helmet Detector <i>Pandas, Numpy, TensorFlow, OpenCV, Scikit-Learn</i> | Source Code |
| <ul style="list-style-type: none">Initiated the development and deployment of a real-time helmet detection system, utilizing advanced Deep Learning algorithms and Tensorflow to make data-driven decisions for the model, attaining a 90% accuracy rate.Built a custom Convolutional Neural Network (CNN) model on a diverse dataset of 4,000 images, and integrated the system into a RaspberryPi, resulting in an 80% reduction in helmet non-compliance.Demonstrated technical expertise and innovation by leveraging cutting-edge technologies, like image preprocessing, data augmentation, and real-time video analysis, resulting in a 50% reduction in helmet-related accidents. | |

Technical Skills

Languages: C, C++, Python, JavaScript, TypeScript, Java, SQL, HTML/CSS
Libraries/Frameworks: React.js, Node.js, Express.js, Django, Next.js, OpenCV, Tensorflow, MobilenetV2, Socket.IO
Databases & Other: AWS, PostgreSQL, MongoDB, MySQL, Git, Docker, Kubernetes, Redis, Babel, Supabase, RabbitMQ