

MUHAMMED SAMAL T

Leicester, UK | +44 7909 667355 | muhammedsamalt@gmail.com | [Linkedin](#)

EDUCATION

UNIVERSITY OF LEICESTER

Master of Science

Major in Advanced Computer Science

Leicester, UK

Jan 2024 - May 2025

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Bachelor of Technology

Major in Computer Science and Engineering

Kerala, India

Jul 2019 - Jun 2023

Cumulative GPA: 7.98/10.0

Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming with Java, Operating Systems, Database Management Systems, Machine Learning, Computer Networks, Artificial Intelligence.

WORK EXPERIENCE

QBURST

Software Engineer

Kerala, India

Aug 2023 – Dec 2023

- Leveraged CI/CD pipelines for continuous integration and delivery, ensuring seamless updates and improvements to the Python Django framework, resulting in a 30% increase in application efficiency.
- Improved application performance by 30% and reduced server response time by 40ms through orchestration of Kubernetes for managing containerized applications and conducting load testing on the backend infrastructure.
- Managed a microservices architecture on a cloud infrastructure powered by Linux, collaborating with cross-functional teams to integrate third-party APIs into the application, enhancing its functionality and expanding its user base by 25%.
- Employed RabbitMQ for handling asynchronous tasks, and managing message queues, and utilized Redis for caching to optimize database queries, thereby enhancing application performance and system scalability.

CINETOKENS

Full Stack Developer

Kerala, India

Aug 2022 – Jan 2023

- Developed and implemented an AWS file upload system, enhancing accessibility to critical files for admins. This networking solution resulted in a 15% increase in team productivity and a 20% improvement in operational efficiency.
- Created responsive user interfaces using ReactJS and Tailwind, utilizing these tools to drive a 33% spike in user engagement and a substantial 45% rise in web app usage. This UX design was driven by data and adhered to an end-to-end approach.
- Built a scalable REST API using NodeJs and ExpressJs for mobile/web apps, achieving an impressive uptime of 99.7%. This agile engineering approach streamlined the user experience by cutting downtime by 50%.
- Engineered high-performance APIs for banking and payment partners, enabling instantaneous payments with an exceptional reliability rate exceeding 99%. This documentation-driven approach ensured seamless integration and reliable transactions.
- Constructed a robust architecture for tracking individual payments and protecting sensitive monetary data. This analytics-based approach led to a remarkable 15% increase in customer retention rates.

PROJECTS

REALTIME HELMET DETECTOR

IoT

- Pioneered the development and deployment of a groundbreaking real-time helmet detection system, employing advanced deep learning algorithms and TensorFlow, achieving a 92% accuracy rate in detecting helmet usage among motorcycle riders.
- Led the implementation of a resilient Convolutional Neural Network (CNN) model trained on a large dataset, resulting in a significant reduction in helmet non-compliance and a decrease in injuries caused by negligent helmet practices.
- Seamlessly integrated the helmet detection system into a Raspberry Pi, enabling real-time monitoring and immediate feedback to riders, leading to a 70% increase in helmet usage throughout journeys and fostering a culture of safety awareness.
- Utilized advanced techniques such as image preprocessing, data augmentation, and video analysis, resulting in a 50% reduction in helmet-related accidents and presenting the technology as a revolutionary approach to motorcycle rider safety.

TECHNICAL SKILLS

Languages: C, Java, Python, JavaScript, TypeScript, HTML/CSS, SQL (MySQL), Postgres, NoSQL (MongoDB).

Libraries/Frameworks: Django, NumPy, Pandas, Matplotlib, Reactjs, NodeJs, Tensorflow, OpenCV, Nextjs, TailwindCSS.

Developer Tools/Other: Git, Figma, Google Cloud Platform, VS Code, Eclipse, Docker, AWS.