Kushal Shahpatel

:+1 8259751198 |:spkushal600@gmail.com | Linkedin: Kushal Shahpatel | GitHUb : Kushal600

PROFILE SUMMARY

- **Innovative** and **results-driven software developer** with hands-on experience in designing and building scalable systems and distributed applications
- Over 6 months of Corporate Experience, delivering impactful real-time solutions and enhancing system efficiency.
- Proficient in **Python, JavaScript, ReactJS, Node.js**, and **AWS**, with strong expertise in **Data Structures, Algorithms, Artificial Intelligence, Machine Learning**, and **Cloud Technologies**
- I'm always looking for opportunities to grow as a professional and as a person with the ability to adapt and learn on the fly.

EDUCATION

University of Alberta, Canada Sept'24 – Dec'26
- Master of Science, Major in Computing Science, Multimedia

CVM University, GCET, India (GPA: 3.76/4) July'20 – May'24
- Bachelor of Engineering, Major in Information Technology.
- Holds a Minor Degree in Internet of Things.
- Relevant coursework: Data Structures, DBMS, Operating Systems, Computer Networks, Web development, Software Engineering, Artificial Intelligence, Soft Computing Techniques, Information and Network Security, Big Data Analytics, Data Science, Cloud Computing.

SKILLS

Programming Languages	JavaScript, TypeScript, Python, C, C++, C#, SQL
Web Technologies	HTML, CSS, API Development, .NET
Framework & Libraries	React.js, Next.js, Node.js, React-Native, Bootstrap, Expo, TensorFlow, PyTorch, OpenCV, U-Net, YOLO
AI & Machine Learning	Deep Learning, Image Processing, Neural Networks, Computer Vision
Cloud Platforms	AWS, Microsoft Azure
Databases	MongoDB, MySQL, NoSQL, GraphQL
Developer Tools	Git, Postman, VS Code, Google Colab, Android Studio
Data Visualization	Power BI, Tableau
Soft Skills	Problem-solving, Agile Development, Team Collaboration, Effective Communication, Adaptability, Self-learning

PROFESSIONAL EXPERIENCE

TridyaTech, Ahmedabad, India May'23 – June'23
Junior Software Developer (Summer Internship)
- Built an EV Ride Application to automate billing and streamline employee workflows using **React-Native** and **Node.js**.
- Improved system efficiency by utilizing **MongoDB** for scalable data management.

AlgoAcharya, Ahmedabad, India Jan'24 – April'24
Junior Frontend Developer Intern (Co-op Internship)
- Contributed to two real-time projects: a Missing Child Web App and an AlgoTrading Platform.
- Developed the front-end for a Missing Child Web App using **React.js** and **AWS**, reducing reporting time for authorities by **30%.**
- Enhanced the AlgoTrading Platform's UI using **Next.js**, improving user satisfaction by **15%.**
- Integrated **REST APIs** to deliver a seamless user experience.

PROJECTS

BoozApp | Link May'23 - June'23
• The EV Ride App facilitates Electric Bike rental for users looking to travel short distances.
• It automizes the manual efforts made by the onsite employees.
• It is a real-time scan and ride app that also generates the bill according to the usage.
• Tools: React-native, Expo Go, Node.js, MongoDB

Automation in attendance system using Facial Recognition | Source Code | Link Jan'23 - May'23
• Designed a system to automate attendance tracking via video analysis, reducing manual effort by **50%**.
• Leveraged Machine Learning for facial detection and recognition.
• Tools: Python, OpenCV, TensorFlow.

CVMU Admin Panel | Source Code July'23 - Aug'23
• It is an Admin panel for the management of the whole minor degree across the university.
• Admin can create new faculties, give them credentials, create new subjects, announce the results, and admit the students.
• Tools: React.js, Bootstrap, AWS, Node.js, MongoDB

Shadow Localization in Thermal Image Sept'24 – Dec'24
• Built models using **U-Net** and **U-Net++** architectures with spatial attention layers to enhance shadow detection in thermal images.
• Designed multi-channel pipelines by integrating edge map and directional features, improving accuracy on annotated datasets.
• Designed and prepared custom training data using the Roboflow platform, including annotation and preprocessing, to optimize models for real-world scenarios.
• Tools: Python, TensorFlow, RoboFlow.

Occluded Object Detection for Cow Segmentation Sept'24 – Dec'24
• Developed a scalable system to detect occluded cows in video datasets, tackling challenges like unstable footage, limited data, and background noise.
• Utilized advanced computer vision techniques (e.g., Mask R-CNN, YOLO) and optimized model performance for real-world scenarios
• Tools: Python, TensorFlow, PyTorch, OpenCV.

TECHNICAL CERTIFICATES

1. Introduction to Artificial Intelligence by IBM
2. Machine Learning with Python by IBM
3. Data Science Fundamentals for Data Analysts by databricks
4. Software Architecture by University of Alberta
5. Introduction to the Internet of Things and Embedded Systems