Kushal Shahpatel - [Portfolio Website](#)

📞:+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 streamlining workflows in fast-paced environments.
- 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
- Relevant coursework: AI in Multimedia, Image and Video Processing, Computer Vision and 3DTV, Graphics and Animation, Multimedia Communications, Augmented Reality and Teleprocessing.

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, Software Engineering, Artificial Intelligence, Soft Computing Techniques, Information and Network Security, Big Data Analytics, Data Science, Cloud Computing.

PROFESSIONAL EXPERIENCE

C-Tribe Festival, Edmonton, AB, Canada   Jan'25 – April'25
Agentic Workflow Research and Software Developer Intern
- Conducting Research to improve task management and decision-making in collaborative environments with **Agentic Workflow**.
- Contributing to the development of their platform
- Collaborating with cross-functional teams to integrate findings into scalable applications.

AlgoAcharya (FinTech Company), 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.

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.

PROJECTS

Occluded Object Detection for Cow Segmentation | GitHub   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.

Shadow Localization in Thermal Image | GitHub   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.

CVMU Admin Panel | GitHub   July'23 - Aug'23
- It is an Admin panel for managing 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

BoozApp | YouTube   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 | GitHub | YouTube   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.

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 & ML:** Large Language Models, Natural Language Processing, Parallel Processing with CUDA, Computer Vision
- **Databases:** MongoDB, MySQL, MS SQL Server, NoSQL, GraphQL
- **Cloud Platforms:** AWS, Microsoft Azure, Oracle Cloud Platform
- **Data Visualization:** Power BI, Tableau
- **Tools:** Git, Jira Postman, VS Code, Cursor, Google Colab, Android Studio, MS Excel, Word, PowerPoint, Outlook
- **Soft Skills:** Problem-solving, Attention to Detail, Agile Development, Team Collaboration, Effective Communication, Adaptability, Self-learning

TECHNICAL CERTIFICATES

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