Amit Munna Gupta

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EDUCATION

University of Texas at Arlington, Arlington, Texas
Masters in Computer Science, 2022 – Present
VIVA Institute of Technology, Mumbai, India
BE Computer Engineering, 2018 – 2022

INTERNSHIPS

PayNav 09/2021 – 12/2021
- Led the UI/UX development and managed the backend operations for a financial application using Flutter, ensuring optimal user experience.
- Integrated Firebase for database management and leveraged Postman API for robust API development and testing, focusing on efficiency and real-time system updates.
- Enhanced transaction processing efficiency by 20%, significantly improving the application's performance and reliability for over 1000 users.

e-Yantra Summer Internship (IIT Bombay) 05/2020 – 06/2020
- Led the development of a cross-platform application using Flutter and React Native, enabling real-time camera feed processing and autonomous navigation with advanced machine learning algorithms, leveraging Python, TensorFlow, and OpenCV.
- Integrated vehicle control via Bluetooth with Raspberry Pi, applying robust hardware-software integration techniques. Utilized the CARLA simulator for environment testing, demonstrating proficiency in IoT and real-time system applications.
- Employed Agile development practices, RESTful API design, and CI/CD pipelines to enhance project efficiency, ensuring rapid development cycles, high-quality code, and seamless deployment.

FREELANCE PROJECTS

Kataria Plastics 01/2021 – 02/2021
- Developed a unified web and mobile platform for consignment bidding with React.js, Node.js, and Flutter, integrating WebSocket and Apache Kafka for real-time updates, benefiting over 500 users with instant notification capabilities.
- Enhanced UX and operational efficiency through GraphQL, streamlining the bidding process and facilitating direct interaction between Kataria Plastics and consumers, leading to a 30% increase in user engagement.

Believe ExIm 12/2020 – 01/2021
- Developed a dynamic e-commerce platform for Believe ExIm using React.js and Node.js, with a focus on responsive design using Bootstrap and enhanced interactivity through JavaScript.
- Platform combined with a strategic content update and intuitive navigation, resulted in a 3x increase in customer engagement.

PROJECTS

DRISHYAM 10/2021 – 02/2022
- Interviewed over 200 deaf and mute students to understand their needs, informing the development of a sign language interpretation tool.Developed an AI sign language tool using Python, OpenCV, PyTorch, MoviePy, TensorFlow, focusing on deep learning and neural networks for real-time interpretation.
- Significantly improved communication accessibility for the deaf and mute community with this innovative technology.

SMART SURVEILLANCE 01/2020 – 03/2020
- Engineered a detection system using Python, TensorFlow, OpenCV, and Pose Detection, integrated with Firebase and Flutter for real-time monitoring.
- Projected to assist police in reducing crime rates by enabling quicker responses to potential threats or unusual events.

SKILLS

Programming Languages: Python, Java, C/C++, SQL, Dart
Web Development: HTML, CSS, JavaScript, Node.js, React
Mobile Development: Flutter, Android (Kotlin, Java), React Native
Machine Learning: TensorFlow, PyTorch, Data Analysis, Computer Vision, Scikit-learn, NLP
Cloud Computing: AWS, Azure
Databases: MySQL, Firebase, MongoDB
Tools: VS Code, Jupyter Notebooks, Linux, Docker, Version Control (Git, GitHub, GitLab)
Soft Skills: Problem-Solving, Teamwork, Effective Communication, Adaptability

PUBLICATIONS

- Amit Gupta, S. S. Koltharkar, H. D. Patel and S. Naik, "DRISHYAM: An Interpreter for Deaf and Mute using Single Shot Detector Model," 2022 8th International Conference on Advanced Computing and Communication Systems (ICACCS), 2022, pp. 365-371, DOI: 10.1109/ICACCS54159.2022.9785254.
- Amit Gupta, S. S. Koltharkar and H. D. Patel, "A review on the perception and recognition systems for interpreting Sign Languages used by Deaf and Mute," 10th National Conference on Role of Engineers in Nation Building (NCRENB), Volume 1, Issue 5 (2022), ISSN(Online): 2581-7280.