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 development of the user interface and managed the back-end using Flutter, Firebase, and Postman API, focusing on efficiency and real-time updates.
- Enhanced transaction efficiency by 20%, ensuring a smoother experience for users.
- Benefited over 1000 users by improving the system's performance and reliability.

e-Yantra Summer Internship (IIT Bombay), 05/2020 - 06/2020:

- Developed an advanced Flutter application enabling real-time camera feed integration, in-app model for steering angle predictions, and robot control via Bluetooth with Raspberry Pi.
- Utilized technologies like Python, Flutter, Android, TensorFlow, OpenCV, CARLA, and Raspberry Pi.
- Demonstrated skills in app development, machine learning, and hardware integration.

FREELANCE PROJECTS

Kataria Plastics, 01/2021 – 02/2021:

- Developed a web and mobile application for consignment bidding using Flutter, Google APIs, and Firebase, with a focus on real-time database updates for prompt bid notifications.
- Streamlined the consignment bidding process, improving user experience and enabling direct communication between the company and consumers.
- Enhanced company-consumer interaction and operational efficiency in the bidding process.

Believe ExIm, 12/2020 - 01/2021:

- Constructed a static webpage using HTML, CSS, JavaScript, and Bootstrap to showcase Believe ExIm's import/export products.
- Focused on user-friendly design and clear presentation of product information.
- Achieved a 3x increase in customer engagement through the improved online presence.

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 the solution using Python, OpenCV, TensorFlow, Keras, and MoviePY, featuring real-time action detection for accurate sign language interpretation.
- Significantly improved communication accessibility for the deaf and mute community with this innovative technology. **SPYDER**, 11/2021 01/2022:
- Developed an encryption and decryption package, implementing the functionality in Java and integrating it with a Flutter application.
- Utilized Java libraries to perform text encryption and decryption within the app, ensuring secure data handling.

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.
- Developed immediate alert mechanisms to notify nearby police officers in case of detected abnormal activities.
- 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, JavaScript, Dart

Web Development: HTML, CSS, JavaScript, React Mobile Development: Flutter, Android, React Native

Machine Learning: TensorFlow, PyTorch, Data Analysis, Computer Vision

Cloud Computing: AWS Databases: MySQL, Firebase

Tools: VS Code, Jupyter Notebooks, Version Control (Git, GitHub, GitLab)

Soft Skills: Problem-Solving, Teamwork, Effective Communication

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.