Danishjeet Singh

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📚 Education

Indiana University, Bloomington   **Bloomington, IN**
B.S. in Computer Science | 3.62 GPA   May 2024
Minor: Data Science & Statistics

✋ Skills

Python(Pandas, NumPy, scikit-learn, matplotlib, PyTorch), SQL(Postgres, MongoDB), JavaScript(React), R, Java, HTML, CSS(Tailwind, Bootstrap), Latex, Git/Terminal, Linux, Adobe Illustrator, Adobe Photoshop, Adobe XD, Adobe InDesign, Figma

💼 Experience

Observatory on Social Media, Indiana University   **Bloomington, IN**
Research Assistant   January 2023 - Present
- Revamped Twitter API data pipeline, achieving a 99% increase in download speed through expert implementation of multiprocessing and asynchronous calling in Python.
- Built swift and efficient algorithms using computer vision to detect AI generated faces on the Twitter platform with 90% accuracy.
- Managed a team of 5 graduate students in developing a deep learning-based approach utilizing advanced architectures like Mask R-CNN to identify GAN generated human faces, showcasing strong leadership and mentoring skills

IU Computer Vision Lab, Indiana University   **Bloomington, IN**
Research Assistant   May 2022 - January 2023
- Conducted research on the application of Deep Learning techniques, including Convolutional Neural Networks(CNN's) and Generative Adversarial Networks(GAN's), for object and image recognition.
- Applying various dimensionality reduction techniques to analyze the relationship between the size of training datasets and the performance of classifiers, using visualizations to facilitate understanding.

💻 Projects

Generative Adversarial Network Classifier
- Proficiently built and trained a deep learning model that produced a large number of novel and visually appealing images from the MNIST dataset.
- Developed a robust classifier model capable of accurately identifying generated and authentic images, achieving a high accuracy rate of 93%

Bankist App
- Conceptualized and formulated the idea, digital assets and product cycle of a simulated banking app.
- Established a marketing website along with a prototype of the banking app using JavaScript to generate advertisement and user activity and gained over 200+ visits.

🤖 Activities

Google Developer Student Clubs   **Bloomington, IN**
Technical Lead   Sep 2021–Present
- Delivered engaging machine learning lectures, covering SVM, CNN, and other architectures, and created hands-on image classification projects with PyTorch, showcasing strong communication, pedagogical, and technical skills
- Introduced advanced topics like style transfer and GANs, providing students with exposure to cutting-edge techniques, demonstrating a deep understanding of modern machine learning advancements.