Yahya Mateen

yahya.valeo@gmail.com | 315-728-1353 | yahyamateen | yahyavaleo | yahyavaleo.github.io

Summary: Engineering graduate with expertise in machine learning, deep learning, and web development. Proficient in mathematical formulation, with a proven track record of project implementation and a keen eye for user experience.

Education

University of Engineering and Technology, Lahore Sep 2019 - Oct 2024
Bachelor of Science, Mechatronics Engineering
Relevant Coursework: Statistics, Linear Algebra, Machine Vision, Intelligent Systems, Computer Programming I & II

Experience

Data Science Fellow United States - Remote
Fellowship.AI Oct 2024 - Present

Projects

TeeSize https://github.com/yahyavaleo/teesize
Automatic T-shirt measurement - *PyTorch, OpenCV, PyQt5*
- Developed a deep learning model for T-shirt landmark detection, achieving a PCK score of 95.6%.
- Built an automated data pipeline for cleaning, transforming, and augmenting images.
- Designed robust algorithms to calculate T-shirt sizes to accomodate unsymmetrical and misaligned landmarks.
- Implemented perspective correction, camera calibration, and developed an intuitive GUI.

Kaggle Competition https://kaggle.com/code/yahyavaleo/bank-churn
Bank churn estimation - *LightGBM, Scikit-Learn*
- Created a predictive model for customer churn estimation, achieving 86% accuracy.
- Conducted feature analysis to uncover key drivers of customer churn.
- Developed a data preprocessing pipeline including one-hot encoding, cleaning missing data, and type conversion.
- Utilized LightGBM to efficiently train the classifier, improving computational speed while maintaining high model accuracy.

Yahya Valeo https://yahyavaleo.github.io
Personal website - *HTML, CSS, JS*
- Designed and developed a responsive portfolio website using HTML, CSS, and JavaScript.
- Implemented a clean and modern UI based on the neobrutalism design system.

Drafted Papers

Automatic Measurement of Jeans using Computer Vision **Supervisor:** Mr. Rzi Abbas

Courses

- Convolutional Neural Networks for Visual Recognition Stanford, CS231n
- Linear Algebra MIT, 18.06

Technical Skills

- Programming Languages: Python, C, C++, MATLAB, HTML, CSS
- Libraries: PyTorch, Scikit-Learn, LightGBM, Pandas, NumPy, Matplotlib, Seaborn, OpenCV, ImgAug, PyQt5
- Tools: Git, Microsoft Office suite, LaTeX, Markdown
- Concepts: Data Structures and Algorithms, Convex Optimization, Hypothesis Testing, Experiment Design

Awards

- **Arts competition:** Awarded first place in the arts competition organized by the embassy of Japan in Pakistan.