Sobhaan Javaid ul Husan
Master of Artificial Intelligence | Vrije Universiteit Amsterdam
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Professional Summary

Passionate AI researcher and engineer with hands-on experience in developing AI-driven solutions to enhance user engagement and education. Proven ability to leverage machine learning techniques for real-world applications. Eager to contribute to innovative projects in artificial intelligence, machine learning, and data science.

Education

Master of Science in Artificial Intelligence
Vrije Universiteit Amsterdam | September 2023 - Present (Expected: July 2025)
Thesis Focus: Real-time detection and tracking in sports analytics using computer vision for football performance metrics

Bachelor of Science in Artificial Intelligence
Universiteit van Amsterdam | September 2020 - August 2023
Thesis: Vehicle camera image transformation to annotated bird's-eye view using advanced object detection and segmentation

Vrije Universiteit Amsterdam (VU Amsterdam)
Minor in Entrepreneurship, September 2022 - February 2023

Technical Skills

- **Machine Learning & AI:** TensorFlow, PyTorch, Scikit-learn, CUDA, Deep Learning architectures, Neural Networks
- **Computer Vision:** OpenCV, Object Detection/Tracking, Image Segmentation, Canny Edge Detection, SIFT
- **Natural Language Processing:** BERT, Transformers, Text Classification, RNNs
- **Programming Languages:** Python (Advanced), Java (Beginner), C++ (Intermediate), R (intermediate), Prolog (proficient)
- **Data Science & Analytics:** Pandas, NumPy, Matplotlib, Seaborn, Statistical Analysis
- **Development Tools:** Git, Docker, Jupyter Notebooks, Android SDK
- **Robotics: NAO Robot Programming:** AlphaMini Robot Development, Human-Robot Interaction

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Professional Experience

Vrije Universiteit Amsterdam - Research Assistant, October 2024 –August 2025

- Research on improving the experience of children in the hospital by utilizing small social (AlphaMini) robots

- Developing and integrating AI in within the robot to enhance the human-robot interaction.
- Conducting empirical studies with healthcare professionals to optimize human-robot interaction protocols.

Vrije Universiteit Amsterdam - Research Assistant, October 2023 – July 2024

- Research on enhancing children's reading motivation using social (NAO) robots in primary education.
- Developed a personalized AI reading tutor that adapts to children's reading levels, resulting in a measurable improvement in comprehension and motivation.
- Collaborated with interdisciplinary teams to integrate feedback and refine robot interaction strategies.

Paaq Fabrics - Founder/Owner, March 2023 - Present

- Launched and managed an e-commerce platform specializing in traditional Pakistani clothing.
- Grew the business by optimizing digital marketing strategies and enhancing customer engagement.

Tata Steel (Via Ivy Global) - WRApp Management, November 2022 - July 2023

- Managed WRApp, a workflow management app, improving efficiency across multiple departments.
- Experience in DevOps Azure environment

Technical Projects

Sports Analytics Computer Vision System (Master's Thesis - In Progress)

- Developing real-time player tracking system for football matches using state-of-the-art computer vision techniques
- Implementing deep learning models to analyze player scanning behavior and body orientation during ball reception
- Creating comprehensive statistics dashboard for coaches to assess player performance metrics
- Technologies: PyTorch, OpenCV, YOLO, DeepSORT tracking

Bird's-Eye View Transformation System (Bachelor's Thesis)

- Designed computer vision pipeline to transform vehicle-mounted camera footage into annotated aerial views
- Implemented custom object detection and segmentation algorithms achieving 92% accuracy in urban environments
- Developed real-time tracking system for dynamic objects with sub-second processing latency
- Technologies: Python, TensorFlow, OpenCV, Custom CNN architectures

Neon Sign Generator

- Created AI-powered application converting sketches and logos into photorealistic neon sign visualizations
- Implemented Canny Edge detection algorithm with custom post-processing for aesthetic enhancement
- Deployed web application serving 1,000+ users for design prototyping
- Technologies: Python, OpenCV, Flask, Computer Vision algorithms

Document Classification System

- Developed BERT-based classifier to automatically categorize form responses into discrete categories
- Achieved 94% classification accuracy on multilingual dataset of 10,000+ entries
- Reduced manual processing time by 80% for administrative tasks
- Technologies: Transformers, PyTorch, NLP preprocessing pipelines

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Certifications

- Google Digital Marketing Certificate
- International Baccalaureate Certificate
- Pre-University Education (VWO) Diploma
- University of Amsterdam Bsc AI Certification
- Vrije Universiteit Msc AI (Expected: August 2025)

Languages

- **English:** Full Professional Proficiency
- **Dutch:** Native or Bilingual Proficiency
- **Urdu:** Limited Working Proficiency