

# CONTACT

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## **EDUCATION**

2023 - Present SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY (SLIIT)

 B.Sc. (Hons) in Artificial Intelligence

#### **SKILLS**

- Languages: Python, Java, JavaScript, HTML, CSS
- ML/Al Frameworks:
   TensorFlow, PyTorch, scikit-learn, Keras, OpenCV, NLTK
- Data Tools: Pandas, NumPy, Matplotlib, Jupyter
- Frontend: React, Tailwind CSS, Bootstrap
- Backend: Spring Boot, Node.js
- Databases: MySQL, MongoDB
- Design Tools: Figma, Adobe
   XD, Photoshop, Illustrator,
   Premiere Pro

# HIRULA ABESINGHA

# AI/ML ENGINEER & FRONTEND DEVELOPER

#### **PROFILE**

Al/ML enthusiast specializing in machine learning, deep learning, and neural network architectures, with hands-on experience in model training, optimization, and deployment. Skilled in building Al-powered applications and applying data-driven approaches to solve real-world problems. Strong foundation in frontend development and graphic/Ul design, enabling the creation of intelligent systems with seamless user experiences.

# CORE COMPETENCIES

- Artificial Intelligence & Machine Learning: Model training, evaluation, and optimization
- Deep Learning Architectures: CNNs, RNNs, Transformers, GANs
- Data Science & Analytics: Preprocessing, visualization, feature engineering
- Model Deployment: Integrating models into web applications & APIs
- Frontend Development: Responsive, interactive UI/UX design
- Graphic/UI Design: Prototyping, branding, and user-centered design

#### PROJECTS & EXPERIENCE

# Diabetic Retinopathy Preprocessing & Detection (GitHub)

- Built preprocessing pipelines for medical images.
- Experimented with CNN architectures for classification.
- Applied data augmentation and optimization techniques for accuracy improvements.

#### Car Detection & Tracking System (Personal Project)

- Implemented YOLOv8 for vehicle detection.
- Designed a tracking module to estimate relative speed (faster/slower).
- Applied visualization with distinct colors for speed-based categorization.

# **Frontend Development Projects**

- Built responsive, modern websites with React & Tailwind CSS.
- Integrated backend APIs and optimized UI performance.

#### Design & Branding Work

- Created logos, posters, and UI/UX mockups for academic and freelance projects.
- Designed wireframes and prototypes with Figma and Adobe XD.

## **CURRENTLY LEARNING**

- Advanced Deep Learning (Transformers, Diffusion Models, GANs)
- Computer Vision (object detection, image segmentation)
- Natural Language Processing (text classification, embeddings, LLMs)
- Cloud & MLOps (AWS, Azure, Docker, CI/CD pipelines)
- Advanced UI/UX design for intelligent systems