Mohan Giri

Data Engineer | ML Engineer | Developer

0409320530

mohan_gi@hotmail.com

Skills

Machine Learning & AI

Advanced

PyTorch, Computer Vision, OpenCV, Rasa Framework, NLP, Scikit-learn, Pandas, NumPy, Time Series Analysis, TensorFlow, Keras, YOLO, Object detection

Development

Advanced

Python, Flask, Django, Streamlit, RESTful APIs, Java, HTML/CSS, JavaScript, PHP, Git, React

Data Analysis

Advanced

Statistical Analysis, PowerBI, Data Visualization, Excel, Matplotlib, Seaborn, Librosa

Databases

Intermediate

MySQL, SQLite, PostgreSQL, NoSQL, Neo4j

Tools & Other

Advanced

SCRUM, Jira, Confluence, Git, AWS Cloud Foundation, Robot Framework, Selenium

Recent Computer Applications graduate from HAMK University of Applied Sciences with strong foundation in Data Engineering, Machine Learning, and Software Development. Hands-on experience in developing ML solutions through internships and academic projects, particularly in computer vision and NLP. Eager to apply technical skills and knowledge in solving real-world business challenges through data-driven approaches.

Profiles

Mohan Giri

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Education

HAMK University of Applied Sciences **2021-08-01 - 2024-12-31**

Computer Applications Bachelor

https://www.hamk.fi/en/

Experience

HAMK Smart **June 2024 - Nov 2024**

Machine Learning Engineer Intern

Led the development of a comprehensive system for detecting and classifying blisters in color-coated metal surfaces. Implemented dual-approach solution using traditional machine vision (OpenCV) and deep learning (YOLOv5). Developed Django web application for real-time blister detection and comparison with standard images. Technologies: Python, Django, YOLO, OpenCV, PyTorch, Bootstrap

Cinia Oy **Sept 2023 - Jan 2024**

Summer Project Developer

Collaborated with Finnish tech company to develop call volume prediction system. Integrated external factors using Finnish weather API and calendar events data. Implemented comprehensive data pipeline with ARIMA and SARIMA-X models. Created interactive visualization dashboard for trend analysis. Technologies: Python, Pandas, Scikit-learn, Time Series Analysis, API Integration

SiljaLine **July 2013 - Aug 2021**

Service Manager

Led team operations for cabin preparation, ensuring high service standards and enhanced guest experiences. Managed service quality and supervised staff operations.

Certifications

Data Analyst in PowerBI
DataCamp
Oct 2023

Advanced Data Analyst Course in PowerBI

AWS Academy Cloud Foundation
Amazon
Sept 2023
Badge

AWS Architecture, AWS Cloud, AWS Core Services, AWS Pricing, AWS Support

Languages

English
Fluent

Finnish
Intermediate

Interests

Hobbies

Vlogging, Cooking, Football, Badminton

Projects

Smart Parking Assistant - Thesis Project

Developed an intelligent parking management system combining YOLOv5l-based computer vision (97.9% detection precision) with Rasa chatbot interface (92% intent recognition). Implemented transfer learning with synthetic data augmentation on PKLot dataset, integrated Flask REST API for video processing, and created Streamlit web interface for real-time monitoring.

Python, PyTorch, Rasa, Flask, Streamlit, OpenCV, YOLO

Tree Species Identification System

Developed and implemented a computer vision system for automated tree species identification using YOLOv5 deep learning model. Achieved 96.9% precision in identifying five Nordic tree species (Birch, Maple, Pine, Rowan, Spruce). Created an interactive web interface for real-time tree detection and classification.

PyTorch, YOLOv5, Python, Gradio, Computer Vision

Real-Time Speech Sentiment Analysis System

Developed a real-time speech sentiment analysis system integrating Wav2Vec2 and RoBERTa deep learning models. Implemented audio processing, speech-to-text conversion, and sentiment classification pipeline with visualization capabilities using PyTorch, Transformers, and librosa

Deep Learning, NLP, Speech Recognition, Real-time Processing, PyTorch, Signal Processing, Sentiment Analysis

Gym Website

Full Stack Development Project

Designed and developed full-stack web application for gym management. Implemented features including membership management, class scheduling, and payment processing.

Bootstrap, JavaScript, HTML, PHP, CSS

Web Testing

Implemented automated testing framework for Verkkokauppa.com e-commerce platform using Robot Framework and Selenium. Developed test cases for critical user flows including product search, cart functionality, and checkout process.

Robot Framework, Selenium, Python, Web Testing

References

Tommi Lahti
Teacher Supervisor

tommi.lahti@hamk.fi

Atte Partanen
Internship Supervisor

atte.partanen@hamk.fi

Suman Dahal
Development Manager
Linkedin link

suman.d.dahal@outlook.com