IJLAL HUSSAIN KHAN

Software Developer

Oulu, Finland (Open to Relocation to Helsinki)   +358-449473703

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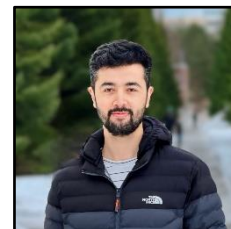
SUMMARY

Results-driven Software Developer & BI Engineer with 1.5+ years of experience building AI-driven systems, automating workflows, and optimizing data pipelines. Passionate about leveraging AI/ML and cloud technologies to drive innovation in web and enterprise applications. With a strong technical background in Python, Flask, Apache Airflow, and Docker, I enjoy working on complex projects involving large datasets and building systems that streamline business processes. I hold a Master's degree in Computer Science from the University of Oulu, where I focused on applied computing, particularly in the areas of AI and Large Language Models (LLMs).

TECHNICAL SKILLS SET

Languages: Python, Java, C#

Frameworks: TensorFlow, PyTorch, Flask, React.js

Databases: MySQL, PostgreSQL, MongoDB, ORMs

Tools: Docker, Kubernetes, Git, AWS, Tableau

Testing: Pytest, Selenium

CI/CD: Github Actions, Gitlab CI/CD

INTERPERSONAL SKILLS

Effective Communication

Team Collaboration

Problem Solving

Leadership

Research

Knowledge Sharing

PROFESSIONAL EXPERIENCE

Research Assistant - Software Developer (Python)   Jan 2024 – Aug 2024
University of Oulu | Oulu, Finland

- **Developed intelligent agents** – Combined TinyML and Generative AI (Language Models) to enable adaptive traffic prediction with **95%** accuracy, optimizing network management for wireless communication networks. (Thesis published on Oulu Repository: Edge Enhanced Network Monitoring Using TinyML, 2024, Ijlal Khan).

- **Instructor & Course Contributor** – Tools for Artificial Intelligence, Edukamu. Designed and taught course content focused on AI tools and their applications. (Course link)

Skills: IoT, Machine Learning, Generative AI, Research and Development, Presentation Skills, Web Engineering, Linux

Business Intelligence Engineer   Dec 2020 – Jan 2022
Biome Analytics, Inc.| US-based healthcare technology firm

- **Designed and executed data pipelines** – Extracted critical data from the central warehouse and transformed it for seamless visualization.

- **Automated BI workflows** – Developed dynamic dashboards and deployed them in production environments.

- **Created interactive Tableau dashboards** – Built visually compelling and actionable insights for stakeholders.

- **Optimized database performance** – Managed and improved SQL databases to streamline data retrieval and enhance storage efficiency.

- Pioneered automated Tableau dashboard testing – Developed Python scripts to ensure dashboard quality and functionality, automating **80% of test cases** and reducing manual testing efforts.

- Implemented comprehensive test cases – Designed detailed test scenarios to validate dashboard performance.

- Reduced testing time by 60% – Automated Tableau dashboard validation using Selenium and Kinesis CI.

- Improved front-end test management – Developed a Python-Flask web application to enhance testing workflows.

Skills: Data Analytics, Python, SQL, Tableau, QA Automation, Teamwork, Attention to Detail

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EDUCATION

Masters in Computer Science and Engineering – **Applied Computing**   2022 – 2024
University of Oulu - Finland

    CGPA: *4.27 / 5.0*

    Courses: Software Defined Systems **|** Distributed Systems **|** Machine Learning **|** HCI

Bachelor of Science in Software Engineering   2014 – 2018
COMSATS University Islamabad - Pakistan

    CGPA: *3.46 / 4.0*

    Courses: Object Oriented Programming **|** Data Structures and Algorithms **|** Software Design **|** Web Programming | Software Quality Assurance **|** Artificial Intelligence

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PROJECTS

My Nas   A home storage solution for organizing documents and images, with SSL encryption and a reverse proxy for secure access.

IoT-ML   Running ML models on IoT devices like Arduino Nano for real-time predictions and efficient edge computing.

WebArchitect   A Dockerized web application with client-server architecture, featuring a RESTful API, MySQL for data storage, and a CI/CD pipeline for automated testing and deployment.

HOBBIES

Playing Table Tennis and Volleyball 🏓 🏐   Building and optimizing home server and NAS solutions 🖥 📦

REFERENCE

SUSANNA PIRTTIKANGAS

RESEARCH DIRECTOR @ UNIVERSITY OF OULU, AI SCIENTIST SILO.AI
(Contact available upon request)

KHALID LATIF

VP, R&D BIOME ANALYTICS

(Contact available upon request)