Mohammad Aliyawar Khan

+1 438 787 0249 | mohammadaliyawar.khan@mail.concordia.ca | linkedin.com/in/md-aliyawar-khan

EDUCATION

Concordia University, Montreal — Quebec, Canada
Master of Engineering - Software Engineering — *Sep. 2024 - Present*

Jamia Millia Islamia, Delhi — New Delhi, India
Post Graduate Diploma in Computer Application — *Sept. 2022 - June 2023*

Aligarh Muslim University, Aligarh — Uttar Pradesh, India
Bachelor of Science (Hons.) in Mathematics, Minor in Statistics and Physics — *July 2019 - Aug 2022*

EXPERIENCE

Software Engineer Intern — June 2023 - December 2023
NIMACT — *GHAZIPUR, UP, India*

- Completed full-stack training and applied it in building and maintaining responsive web platforms.
- Designed scalable databases to improve data retrieval and analysis, supporting internal dashboards.
- Worked closely with team members to translate data into actionable insights through interactive visualizations.
- Implemented user-centric improvements that enhanced platform usability and reduced page load times.
- Skills: HTML, CSS, JavaScript, C++, Data Analysis, Machine Learning, Communication, Team Collaboration, Database Design

PROJECTS

Elasticsearch: A Distributed Systems Perspective | *Elasticsearch, Docker, Python*

- Explored Elasticsearch's distributed features, including fault tolerance and data sharding, through practical experiments.
- Enhanced query performance by strategically adjusting shard configurations, improving speed and accuracy.
- Simulated failures to test data resilience and ensured system reliability with replica shards.
- Processed over 9 GB of Amazon review data to analyze indexing and search efficiency.
- Skills: Elasticsearch, Distributed Systems, Docker, Python, Performance Testing, Data Analytics

DeepMed Detection - Medical Image Analysis | *TensorFlow, PyTorch, Cloud Computing*

- Led model development to assist in disease detection with accurate and high-performing deep learning systems.
- Applied segmentation methods to enhance detection clarity and ensure structural precision.
- Scaled training and inference through cloud platforms to handle high-resolution medical imaging data.
- Skills: TensorFlow, PyTorch, Deep Learning, Cloud Computing, Medical Imaging, Model Optimization

Fraud Detection System Using Machine Learning and Flask | *Python, Flask, Heroku, GridSearchCV, SMOTE*

- Created a fraud detection tool using RandomForest to identify irregular transactions efficiently.
- Used SMOTE to address data imbalance and improved model accuracy with extensive hyperparameter tuning.
- Deployed Flask-based APIs for real-time classification and hosted the solution on Heroku.
- Skills: Python, Flask, Machine Learning, Heroku, SMOTE, GridSearchCV, API Deployment

CODIS: A website for Coding Society | *React, Node.js*

- Built an interactive web app for a student coding society to showcase events and resources.
- Implemented structured navigation including landing, signup, and contact forms for seamless usability.
- Enhanced engagement with a clean design and fast-loading frontend.
- Skills: React, Node.js, Web Development, UI/UX Design, Front-end Engineering

TECHNICAL SKILLS

Languages: Python, C++, Java, MATLAB, JavaScript, SQL, Java, HTML/CSS, LaTeX
Frameworks & Libraries: React, Node.js, Flask, FastAPI, TensorFlow, PyTorch, Scikit-Learn, NumPy, Pandas, Matplotlib, OpenCV, OpenGL
Tools & Platforms: Docker, Heroku, Git, Power BI, Looker, Tableau, Elasticsearch, Jupyter, VS Code