

Khadiga Idris

Computer Science (Data Science)

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SUMMARY

Software Developer with hands-on experience building AI-powered web applications, machine learning models, and full-stack systems. Experienced with React, Next.js, Django, PostgreSQL, and Python. Passionate about developing scalable software solutions and continuously learning emerging AI technologies.

EDUCATION

Bachelor of Computer Science in Data Science, Albukhary International University

Jan '23 — Jan '26
Alor setar, Malaysia

- Relevant Courses: Software Engineering, Object-Oriented Programming, Database Management.

PROJECTS

Final Year Project(FYP) – AI-Powered Student Assignment Evaluation System, Albukhary International University [Link](#)

- Designed and implemented RESTful backend services using Django REST Framework.
- Developed structured database models using PostgreSQL.
- Built RESTful APIs for assignment submission, evaluation workflows, and admin control.
- Implemented authentication, role-based access control, and business logic validation.
- Performed API testing, functional validation, and debugging to ensure system reliability.
- Integrated ML scoring engine within scalable backend architecture.
- **Tech Stack:** Python, Django, Django REST, PostgreSQL, SQL

Writer Identification Using Deep CNN (Offline Handwriting Recognition) [Link](#)

- Built an offline writer identification system using a deep CNN trained from scratch under strict constraints (no pretrained models, CPU-only inference).
- Designed a geometry-preserving preprocessing pipeline using Otsu binarization, morphological operations, and text-line segmentation.
- Implemented patch-based training (128×256) with ink-ratio filtering to overcome limited training data.
- Achieved Macro AUC: 0.8064 under CPU-only constraints and limited training data.
- Tools: Python, TensorFlow, NumPy, Scikit-learn.

Sentiment Analysis System (NLP Project), Albukhary International University [Link](#)

- Built an end-to-end sentiment analysis pipeline for airline-related tweets (Kaggle dataset)
- Performed text preprocessing and feature extraction using TF-IDF (unigrams & bigrams)
- Trained and evaluated machine learning models (Logistic Regression, Naive Bayes).
- Deployed the model using Streamlit for real-time sentiment prediction
- Tools: Python, Scikit-learn, NLP preprocessing, Streamlit.

WORK EXPERIENCE

Software Developer Intern

Nixfon (M) Sdn. Bhd.

Apr '26 — Present
Kuala Lumpur, Malaysia

- Developed and enhanced AI-powered HR web applications using **Next.js, React, Django REST Framework, and PostgreSQL**.
- Implemented frontend features and integrated REST APIs.
- Contributed to production-ready software in an agile development environment.
- Collaborated on debugging, testing, and improving application performance.

Freelance Web Developer

Jun '21 — Feb '25
Saudi Arabia

- Designed and deployed responsive web applications using WordPress and custom HTML/CSS.
- Managed hosting environments, domain configuration, and deployment workflows.
- Improved website usability and performance through frontend optimization and structured layout improvements.
- Translated client requirements into technical implementation and production-ready websites.
- Website: <https://raqq.net>

PUBLICATIONS

Research Publication-Predictive Model for Employee Turnover

Journal of Human Resource Management (JHRM)

Dec '25

Built and evaluated a CatBoost machine learning model for employee turnover prediction.

Conducted HR data cleaning, feature selection, and model evaluation.
Analyzed key factors influencing employee retention and workforce stability.
Interpreted model results to generate data-driven insights for decision-making.
Publication available on: <https://doi.org/10.46287/QYHZ8899>

SKILLS

Backend Python, Django, REST APIs
Databases PostgreSQL, MySQL, SQLite
Frontend React.js, Next.js, HTML, CSS, TypeScript
Data & ML Data preprocessing, Scikit-learn, Pandas, NumPy, Matplotlib
Tools Git, GitHub
Soft Skills Problem Solving, Analytical Thinking, Team Collaboration, Communication Skills, Quick Learner

VOLUNTEERING

Web Developer / Technical Coordinator, Sanabel Al-Ataa Organization KASALA
Jan '20 — Present
Built and maintained the organization’s website, handling hosting, structure, updates, and providing technical support during meetings and coordination.

EXTRACURRICULAR ACTIVITIES

- **Hackathon Participant – Setel Hackathon 2024**
Collaborated in a team to build ShopSyncAI, an AI-driven shopping recommendation prototype. Contributed to system design and rapid feature development under hackathon time constraints.
- **PayHack 2024 – Open Finance Hackathon**
Developed an AI-based loan approval prototype for credit scoring and fraud detection using a multi-agent approach.

LANGUAGES

Arabic (Native), English (Upper Intermediate)