Bekkouche Fares

+213795667740 | f_bekkouche@estin.dz | linkedin.com/in/fares-bekkouche/ | github.com/1farz1

INTRODUCTION

Master's student in Computer Science specializing in Artificial Intelligence, with a strong foundation in core CS principles and advanced problem-solving skills. I bring extensive hands-on experience from real-world projects in AI and software development, applying theory to practical solutions. My work spans multiple AI domains with a particular focus on Natural Language Processing (NLP), alongside expertise in other key areas of machine learning and intelligent systems.

EDUCATION

- **Master in Artificial Intelligence (Second Year of Graduate Cycle)** — Bejaia, Algeria
  Ecole Superieure en Sciences et Technologies de l'Informatique et du Numerique - ESTIN — *Sep. 2024 – Sep. 2026*
  - **Courses**: Machine Learning, Data Analysis, Data Science Foundations, Big Data, Distributed Databases, Cloud Computing.

PROFESSIONAL EXPERIENCE

- **Flutter Developer - Diraya Inc** — May 2025 – Present
  Remote
  - Developing comprehensive fitness application using Flutter with clean architecture.
  - Implementing SOLID principles and design patterns for maintainable code.
  - Optimizing performance and ensuring smooth user experience across devices.

- **Flutter Developer - Appilo** — September 2024 – February 2025
  Remote
  - Developed responsive mobile applications using Flutter framework.
  - Participated in client meetings and provided technical input for business decisions.
  - Collaborated with design and backend teams to deliver cohesive applications.

- **Flutter Developer - IT Source One** — June 2024 – August 2024
  Remote
  - Developed Arabic language teaching application from concept to deployment.
  - Conducted code reviews and maintained high code quality standards.
  - Created intuitive UI and implemented complex features for enhanced user experience.

- **Mobile and Backend Developer - Createch** — August 2023 – September 2024
  Remote
  - Built robust APIs and backend services for mobile applications.
  - Developed Flutter frontend and integrated with backend services.
  - Ensured code quality and scalability through best practices and testing.

- **Full Stack Mobile Developer - Fiverr** — 2021 – 2024
  Remote
  - Developed and deployed over 5 mobile applications for various clients.
  - Specialized in Flutter frontend and NestJS/ASP.NET backend development.

- **Technical Mentor & Workshop Host - Multiple University Clubs** — 2022 – Present
  Bejaia, Algeria
  - Led technical workshops on Flutter development and mobile app architecture.
  - Mentored students in hands-on projects and software development best practices.

CERTIFICATIONS

- **Associate Data Scientist in Python**: DataCamp
- **Data Analyst in Python**: DataCamp
- **PyTorch and Deep Learning Course**: Coursera
- **Unreal Engine 5 C++ Developer Course**: Udemy
- **Advanced NestJS Guide**: Coursera
- **Flutter & Dart - The Complete Guide**: Udemy

COMPETITIONS AND ACHIEVEMENTS

- **1st Place - DataHack Datathon**: Secured top position in one of Algeria's most prestigious AI competitions, demonstrating exceptional skills in machine learning and algorithmic problem-solving against elite competitors nationwide.
- **2nd Place - TrainIt Datathon**: Developed an innovative AI solution at the School of AI Bejaia's machine learning datathon, recognized for technical excellence and practical implementation.
- **3rd Place - MicroHack Hackathon**: Recognized for technical innovation and effective teamwork at this competitive hackathon organized by MicroClub.

AI PROJECTS AND RESEARCH IN DATA SCIENCE AND MACHINE LEARNING

- **League of Legends Win Predictor**: A ML model that predicts the percentage of winning for each Blue and Red team in League of Legends.
- **DL Based Permutation Flowshop Problem**: This solution implements a hybrid approach combining deep learning with local search optimization to solve the flow shop scheduling problem. The goal is to minimize the makespan across multiple job instances with varying numbers of machines.
- **PC Diagnoses Expert System**: A PC diagnosis system that helps users identify their problems based on yes/no questions. Currently not that efficient.
- **Reverse Transaction ISDB**: The AAOIFI FAS Analyzer is an interactive, AI-powered Streamlit application built to assist finance professionals in analyzing Islamic finance journal entries for compliance with AAOIFI Financial Accounting Standards. Leverages OpenAI's GPT-4 model via LangChain.
- **Ramadan Fasting Health Predictor**: Developed a machine learning model to predict whether a person can safely fast during Ramadan based on their medical information and health indicators.
- **NLP Text Analysis with SpaCy**: Natural language processing project for text analysis using SpaCy library.
- **Sentiment Analysis NLP**: Machine learning model for sentiment analysis of text data.
- **Fake Reviews Detection**: NLP project to detect fake reviews using natural language processing techniques.
- **Fake Tweets Detection**: NLP project to detect fake tweets using natural language processing techniques.
- **Credit Card Approval Prediction**: Developed classification models to predict credit card application outcomes based on applicant data using machine learning techniques.
- **House Price Prediction**: Implemented regression models (e.g., Gradient Boosting) to estimate housing prices based on property features.
- **Credit Card Fraud Detection**: Built machine learning models for identifying potentially fraudulent credit card transactions, focusing on anomaly detection.
- **Urban Sound Classification (XGBoost)**: Developed an XGBoost model using extracted audio features to classify urban environmental sounds.
- **Easy Path Finder**: A web app built using Streamlit and A* algorithm to find the shortest path between two points in a city.

DEVELOPMENT PROJECTS

- **Pronox - Game Predictions Application**: Developed a full-stack game betting application using Flutter, Riverpod, and NestJS with MySQL database, published on Google Play Store.
- **MyFitTool - AI-Powered Fitness Tracking App**: Built comprehensive fitness application with AI-powered exercise recommendations, nutrition tracking, and progress analytics using Flutter and Riverpod.
- **Equitas - Islamophobia Reporting Platform**: Created mobile application with multiple reporting methods, educational resources, and AI chatbot assistant using Flutter and Firebase services.
- **Tayssir - Baccalaureate Exam Preparation**: Developed quiz platform for baccalaureate students with in-app payments, progress tracking, and productivity tools using Flutter.

- **DZ Mouhami - Legal Services Platform**: Created an application for booking appointments with lawyers and providing legal recommendations using FastAPI backend with appointment scheduling and recommendation features.
- **Anime Dragon - Full-Stack Streaming App**: Built anime streaming application with Flutter frontend (Riverpod) and NestJS backend, featuring modern UI and efficient content delivery.
- **BTP - Full E-commerce Application**: Developed comprehensive e-commerce platform with Flutter and Riverpod, featuring complete shopping functionality, order tracking, payment processing, and user management systems.
- **ebuilding-dz - Service Provider Matching Platform**: Developed an app that matches service providers with clients, featuring a modern UI and best practices. Built using Flutter and Riverpod.
- **Coiniha - Interactive Survey Platform**: Cross-platform mobile application offering interactive surveys, quizzes, and personality tests for data acquisition, built with Flutter.
- **dis_logger - Flutter Package**: Developed Flutter package for sending structured logs, errors, and crash reports directly to Discord channels for real-time monitoring.
- **pod_router - Flutter Package**: Created Flutter package simplifying Go Router and Riverpod integration with authentication handling and state-based routing management.
- **Found You CLI - Social Media Tool**: Built Rust-based CLI tool to identify unfollowers on social media platforms, helping users manage their social connections efficiently.
- **Fun & Memorization Game**: Developed interactive memorization game using Flutter and Riverpod to enhance cognitive skills through engaging gameplay mechanics.

Portfolio: https://1farz1.github.io/Fares-Bekkouche-Portfolio/

Skills and Tools

- **Languages**: Dart, TypeScript, Python, C#, JavaScript, Java, SQL, HTML, CSS, XML, C
- **Backend Frameworks**: Express, NodeJS, NestJs, Asp.Net Core, FastApi, Firebase Services, Django
- **Mobile Tech**: Flutter, Riverpod, Bloc, Hive
- **Machine Learning & AI**: NumPy, Pandas, Matplotlib, Seaborn, PyTorch, TensorFlow, Keras, scikit-learn, XGBoost, CatBoost, LightGBM, NLTK, spaCy, Transformers, Hugging Face, OpenCV, TorchVision, Yolo
- **Databases**: PostgreSQL, MongoDB, MySQL, Firebase
- **Frontend Technologies**: React.js, Next.js
- **Tools & IDEs**: VS Code, Android Studio, PyCharm, Git, GitHub, Postman, Swagger, Kaggle, Docker, Jira, Slack, Notion, Google Colab, Figma, Overleaf
- **Cloud & Hosting**: Heroku, AWS, Google Cloud Platform, VPS, Supabase, Appwrite
- **Methodologies**: Agile, Scrum, Kanban

Spoken Languages

- **Arabic**: Native.
- **French**: Intermediate.
- **English**: Advanced.