





ALI HABIBULLAH

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 Ali Habibullah

 ALLIA12

 Portfolio

Profile

A results-driven computer science professional with a strong foundation in artificial intelligence, machine learning, and full-stack development. Experienced in developing and leading projects across areas such as generative models, natural language processing, and Computer vision, with real-world applications in sectors like public safety, smart cities, and multilingual systems. Proficient in Python, PyTorch, TensorFlow, and web technologies, with a proven ability to mentor teams, manage large-scale technical programs, and deliver scalable, impactful solutions.

Technical Skills

Programming Languages

Python
C#
Java
PHP
JavaScript

Machine Learning

Keras
TensorFlow
PyTorch
Pandas

Frameworks

Laravel
Django
Angular

Databases

MySQL
Oracle SQL
MongoDB

Work Experience

King Abdullah University of Science and Technology (KAUST),

06/2024 | Thuwal, Saudi Arabia

Research Engineer

- Supervised over 100 students during an intensive summer training program in Computer Vision (CV), Graph Neural Networks (GNNs), Generative AI, Reinforcement Learning (RL), and Natural Language Processing (NLP). This condensed program is equivalent to two full academic semesters
- Teaching Assistant for the "Deep Generative Modeling" Master's course, where I supported instruction on advanced unsupervised learning topics, including diffusion models, StyleGANs, and recent breakthroughs in generative modeling
- Teaching Assistant for the "Natural Language Processing Applications" Master's course, helping guide students from the foundations such as LSTMs and GRUs to advanced topics like Large Language Models (LLMs) and their applications, including Retrieval-Augmented Generation (RAG) for multilingual government use cases
- Supervised "Master's Directed Research" projects, mentoring students as they completed their capstone projects across sectors such as public safety, Hajj crowd management, and smart city initiatives. Several of these projects are deployed on country wide level
- Managed the four stage KAUST Academy AI Specialization Program - 2025 batch, which received over 15,000 application. After a highly selective filtering process, the top 120 students were chosen for global summer internships, which I oversaw at various institutions worldwide
- Led diverse AI research projects, including:
 - Hurricane path prediction using real world data with students from the University of The Bahamas
 - Fine-tuning LLMs to generate Arabic narratives in different Saudi dialects, in collaboration with Ministry of Interior (MOI) students
 - Developing a hybrid image generation model by using a VAE decoder as the generator component of a GAN, as a research initiative with MOI students

Lyrae Digital, Software Developer

06/2023 – 06/2024 | Jeddah, Saudi Arabia

- Was involved in the product management of GA_Universe, a local low-code/no-code platform, by writing new features and enhancing existing ones
- Oversaw the JIRA ticketing system, writing over 700 tickets to streamline feature implementation and enhancements, increasing process efficiency by 35%
- Involved in Quality Assurance for most submitted tickets, enhancing project reliability and adherence to standards.
- Developed onboarding materials and designed the launch website using HTML, CSS, and PHP
- Managed the documentation website as an open-source project on GitHub using Docusaurus
- Led a subsidiary project focusing on an e-commerce platform designed for wholesale transactions

King Abdullah University of Science and Technology (KAUST),

01/2024 – 03/2024

Teaching Assistant

- Served as a Head Teaching Assistant for the Artificial Intelligence track, focusing on stages two and three
- Assisted in teaching over 500 students the fundamentals of machine learning and deep learning using PyTorch
- Worked across three different universities: University of Jeddah (UJ), King Abdulaziz University (KAU), and King Abdullah University of Science and Technology (KAUST)

KAU HPC Center, Intern

06/2022 – 10/2022 | Jeddah, Saudi Arabia

- Resolved critical issues in the admin dashboard and other sections
- Developed user interfaces and backend logic with Laravel, HTML, Tailwind CSS, and React JS for various functionalities

- Led the AZIZ account request feature development, integrating email alerts, attachment processing, and tracking request history
- Selected for a leadership role as an intern due to outstanding performance
- Managed and mentored a team of 8 interns, overseeing project tasks
- Maintained version control of the website on GitHub, enhancing team workflow and collaboration

Education

Computer Science Bachelor's Degree, King Abdulaziz University [🔗](#)
4.98/5 GPA

2019 – 2023 | Jeddah, Saudi Arabia

Certificates

Meta Back-End Developer Professional Certificate, META, 9 Courses [🔗](#)

Machine Learning Specialization, Coursera, 3 Courses [🔗](#)

Deep Learning Specialization, Coursera, 5 Courses [🔗](#)

IBM Data Science Professional Certificate, IBM, 5 / 10 Courses Completed

Advanced Artificial Intelligence: Computer Vision, King Abdullah University of Science and Technology (KAUST)

Introduction to Artificial Intelligence, King Abdullah University of Science and Technology (KAUST)

Artificial Intelligence Track, King Abdulaziz University

Projects

Graduation project, Royal defenders [🔗](#)

- Developed a pathfinding simulation in Unity, showcasing strategic defense placements and upgrades to deter incoming entities
- Implemented core components including the Bank system for tracking entity vitality and resources, and Entity AI for managing movements and attributes
- Enhanced user interaction through User Movement controls and Defense Targeting for entity engagement
- Designed a Grid system to control the simulation layout and integrated three pathfinding algorithms: Breadth First Search, Uniform Cost Search, and A* Search

EN-AR Translator [🔗](#)

- Developed an English to Arabic translator using the Transformer architecture, integrated into a Django web
- Conducted a two-phase training process utilizing the CCMatrix dataset to optimize translation performance
- Wrote a Jupyter notebook for training translation models and an interactive translation platform for real-time use

NLP-Project-Sentiment [🔗](#)

- Developed a CNN model using TensorFlow for immediate sentiment analysis feedback, complete with a GUI
- Trained the model on Kaggle's Sentiment140 dataset, achieving an accuracy of 93.79%
- Enhanced the architecture to capture bi-grams to quad-grams, incorporating dense layers and dropout for effective regularization

Review IT [🔗](#)

- Created an entertainment review platform with a focus on user-centric interface and backend functionalities
- Led the development of user registration, an interactive Reviews system for sharing opinions, and a Feedback mechanism to enhance user engagement
- Established a scalable MySQL database, showcasing web development expertise and promoting a seamless user experience

Soft Skills

Communication | Problem solving | Time management | Critical thinking | Teamwork | Quick learner