Abdullah Habberrih

Computer Science Graduate | AI & NLP Researcher | Backend & IoT Developer

<u> LinkedIn</u> | <u>ORCID</u> | Portfolio: <u>habberrih.ly</u> | **○** <u>GitHub</u> | <u>ResearchGate</u>

Education

Master's Degree - Student Exchange of Erasmus+ ICM Program Sapienza University of Rome

Rome, Italy

Sep 2024 - Feb 2025

Major in Computer Science

Bachelor of Information Technology

Misurata University

Misurata, Libya

Oct 2018 - Aug 2023,

Major in Computer Science

Publication and Conferences

- Habberrih, Abdullah & Abuzaraida, Mustafa. (2024). A review of the available Arabic dialects datasets for Sentiment Analysis. 1. 1-6. Journal of Sustainable Research in Applied Sciences. (ResearchGate) (09/2024).
- Habberrih, Abdullah & Abuzaraida, Mustafa. (2024). Sentiment Analysis of Libyan Dialect Using Machine Learning with Stemming and Stopwords Removal. <u>DOI</u> (07/2024)
- Habberrih, A., Abuzaraida, M.A. (2023). Sentiment Analysis of Libyan Middle Region Using Machine Learning with TF-IDF and N-grams. Conference: ILCICT2023. International Libyan Conference for Information and Communications Technologies. <u>DOI</u> (06/2024).
- Habberrih, A., Abuzaraida, M.A. (2024). Sentiment Analysis of Arabic Dialects: A Review Study. In: Zakaria, N.H., Mansor, N.S., Husni, H., Mohammed, F. (eds) Computing and Informatics. ICOCI 2023. Communications in Computer and Information Science, vol 2001. Springer, Singapore. DOI (01/2024).
- Habberrih, Abdullah & Abuzaraida, Mustafa. (2023). SENTIMENT ANALYSIS OF LIBYAN DIALECT USING MACHINE LEARNING WITH STEMMING AND STOP-WORDS REMOVAL. Conference: Proceedings of Innovative Research, Invention and Application Exhibition (I-RIA) 2023 at Malaysia (ResearchGate) (09/2023).

Work Experience_____

Backend Developer <u>Lamah</u>

06/2022 - Present

- Implementing and maintaining robust APIs using NestIs, NodeJs, and ExpressJs, facilitating seamless front-end integration and enhancing application functionality.
- Demonstrated expertise in containerization technologies, specifically Docker, optimizing application deployment processes, and ensuring consistency across development, testing, and production environments.
- Collaborated closely with cross-functional teams, including front-end developers and product managers, to define API specifications and ensure alignment with business objectives and user needs.
- Adept at documenting front-end and back-end systems, providing clear and concise guidelines for developers, and contributing to the team's knowledge sharing and best practices.
- Skilled in writing comprehensive end-to-end (E2E) tests for backend systems, ensuring application reliability and performance, and contributing to the maintenance of high-quality code standards.
- Good at utilizing version control systems (VCS), particularly Git, for effective team collaboration, code versioning, and facilitating a continuous integration and delivery pipeline.
- Experienced in working with databases such as PostgreSQL, MongoDB, and NoSQL.

Research and Development Programmer

Lamah

01/2024 - 09/2024

IOT Projects (Air Quality Index)

- Developed ESP8862 controller code using Arduino IDE to read sensor data and transmit it to a platform.
- Created a C++ library to facilitate Over-the-Air (OTA) updates for the controller.
- Developed a library to manage first-time controller connections, ensuring seamless integration with the Thingsboard platform, automated device registration, and OTA updates.
- Customized the Thingsboard platform by adding additional features.
- Used Terraform (Infrastructure as Code) to set up cloud instances on Hetzner for building and customizing Thingsboard, pushing Thingsboard Docker images to DockerHub, and automating the process using Jenkins pipelines with GitHub integration and Slack notifications.

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- Built a NestJS application to extract data from the Thingsboard platform, offering CSV file exports and scheduling data checks periodically via a cron job.
- Modified existing libraries, such as Wasp4G from Libelium, to enable devices to send application/JSON requests.

Volunteer Work_

Ambassador

Huawei (Seeds For The Future Program)

06/2022 - 06/2023

- Represented Libya as an Ambassador in Huawei's prestigious SFTF program in 2022, a global initiative aimed at cultivating young talent in the fields of technology and innovation.
- Spearheaded the integration of advanced technologies and innovative practices from the SFTF program into local educational and tech communities, fostering a culture of continuous learning and adaptation.
- Facilitated knowledge transfer and the adoption of cutting-edge technologies among young professionals and students in Libya, empowering them with the tools and insights needed to contribute to the national tech ecosystem.

Leader

Technical Team at IT Faculty Students' Union

05/2022 - 10/2023

- Served as the Technical Team Leader for the college students' union, leveraging technical expertise to support and enhance student learning and engagement through technology.
- Orchestrated a programming competition during the sixth technical and cultural season at my college, managing logistics, setting challenges, and fostering a competitive yet collaborative environment for participants.
- Demonstrated leadership in managing and coordinating the technical team, fostering a culture of innovation, teamwork, and continuous learning among student volunteers.

Skills

Technical Skills

NestJS, Node.js, Express, Python, JavaScript, TypeScript, PostgreSQL, MongoDB, Prisma, Git, GitHub, Docker, Jenkins, Terraform, LangChain, LangGraph

• Tools & Frameworks

LangChain, Arduino IDE, Colab, CI/CD, Jest, E2E Testing, WordPress

Soft Skills

Teamwork, Leadership, Problem-Solving, Research, Time Management, Communication

Languages

Fluent: Arabic, English | Beginner: Italian

Others

- Bronze Award: Won 2nd place in the Best Graduation Project Competition (Libya Innovation Award) out of 250 participants (01/2025).
- Gold Award: Won 1st prize for the best academic poster at the Misuarata University Information Technology College (06/2023)
- Bronze Award: Won 3rd prize for the development of a Smart NICU solution at the Huawei <u>Tech4Good</u> Global Competition (01/2022)
- Bronze Award: Won 3rd prize at the (I-RIA) 2023 Competition, Malaysia (09/2023)