Abdelmalek BENMEZIANE

Baraki, Algiers, Algeria | Gmail | 0676500028 - 0541726630 | Portfolio website | LinkedIn
Github

ABOUT ME

Computer engineer, currently seeking a challenging and enriching position in the field of computer science. Armed with a strong academic background and practical experience, I am ready to apply my technical skills and in-depth knowledge to contribute to the success of an innovative company. Passionate about technical challenges, I am determined to actively participate in the development and improvement of computer solutions.

EDUCATION

Tarek Ibn Zyad High School, Baccalaureate in Experimental Sciences — Sept 2014 – Jul 2017

- GPA: 3.7/4.0
- **Coursework:** Math, Physics, Sciences and more.

University of Sciences and Technology Houari Boumediene, Bachelor's degree in Computer Science (CS) — Sept 2017 – Jul 2022

- GPA: 2.0/4.0
- **Coursework:** Data Structures and Algorithms (DSA), C, Java, Python, Calculus, Algebra, Probability, Statistics, Database Management Systems (DBMS), Object-Oriented Programming (OOP), Compiler Design (CD), Networking, Operating System (OS), Web Development, and more.

University of Sciences and Technology Houari Boumediene, Master's degree in Bioinformatics — Sept 2022 – Jul 2024

- GPA: 2.0/4.0
- **Coursework:** Design and Analysis of Algorithms (DAA), Python, Linux, Numeric Analysis, Basics of Biology, Data Mining, Machine Learning (ML), Classification Algorithms, Clustering Algorithms, Deep Learning (DL), Project Managment, Image Processing (IP), Data Warehouse (DW), Advanced DBMS, Virtual Reality (VR), String algorithms, parallel programming, and more.

EXPERIENCES

Member, Micro Club (MC) – Bab Ezzouar, Algiers — Sept 2017 – Jun 2018

Member, Google Developers Group (GDG) Algiers – Oued Smar, Algiers — Sept 2018 – Jun 2019

Member, Club Scientifique de l'ESI (CSE) – Oued Smar, Algiers — Sept 2018 – Jun 2019

Workshop lecturer (Data Structure and Algorithms course - L2 ISIL), University of Sciences and Technology Houari Boumediene – Bab Ezzouar, Algiers — Nov 2024 – Jan 2025

- Conducting hands-on practical sessions for second-year computer science students (L2 ISIL) focusing on dynamic data structures (linked lists, stacks, queues, trees, graphs, etc.).
- Teaching advanced algorithmic concepts and guiding students through practical implementations.
- Providing support and feedback to students during exercises and projects to enhance their understanding and problem-solving skills.
- Assessing student performance through evaluations and personalized guidance.
- To empower students with a solid understanding of dynamic data structures and prepare them to tackle advanced computational problems in their academic and professional journeys.
- Expertise in dynamic data structures and their real-world applications.
- Strong pedagogical and communication skills to convey complex concepts effectively.
- Team and group management within an academic setting.

Workshop lecturer (Data Structure and Algorithms course - L1 MI), University of Sciences and Technology Houari Boumediene – Bab Ezzouar, Algiers — Jan 2025 – Now

- Delivering hands-on practical sessions to demonstrate the implementation of data structures and algorithms.
- Designing exercises, projects, and quizzes to test student comprehension and reinforce key concepts.
- Offering guidance and feedback to students during labs and helping them with assignments and coding challenges.
- Assisting students in applying theoretical concepts to practical coding problems, encouraging problem-solving skills.
- Empower students with the skills to handle basic data structures and algorithms, while ensuring they understand the importance of efficient memory management and data organization in real-world applications.

PROJECTS

Design and development of an immigration website to Canada for Algerians — Feb 2022 - Jun 2022

- **Tools used:** HTML, CSS, PHP, Latex (Overleaf), XAMPP, Database Management System (DBMS), Font Awesome, VS Code.

Development of an application of image processing algorithms — Feb 2022 - Jun 2023

- **Tools used:** Image Processing, python, LaTeX (Overleaf), VS Code.

Parallel programming in python applied to bioinformatics — Sept 2023 - Feb 2024

- **Tools used:** python, Latex (Overleaf), VS Code.

Development of a data mining and machine learning application with the sklearn package — Sept 2023 - Feb 2024

- **Tools used:** Machine Learning, python, LaTeX (Overleaf), Clustering Algorithms, Classification Algorithms, Data Mining, VS Code.

The use of IoT and Data Science in sustainable agriculture — Feb 2023 - Jul 2024

- **Tools used:** HTML, Web Scraping, PHP, DataTables, XAMPP, Chart js, SQL, Data Warehousing, VS Code.

Personal portfolio — Sept 2024 - Sept 2024

- **Tools used:** HTML, CSS, GitHub, Git, Font Awesome, JavaScript, Responsive Web Design, VS Code, XAMPP.

SKILLS

Data Structures and Algorithms (DSA): Arrays, Linked Lists, Stacks, Queues, Binary Trees, Hash Tables, Graphs, Strings

Programming Paradigms: Procedural programming, Object-Oriented programming (OOP)

Programming Languages: C, C++, Java, Python

Web Development: HTML, CSS, JS, Bootstrap, Font Awesome, PHP, Jquery, Xml, Ajax, Json, Xpath, Chart js, XAMPP

Database: DBMS, SQL, MySQL, Oracle, Relational Database

Operating System: Windows, Linux, Shell, Bash

Machine Learning: Clustering Algorithms, Classification Algorithms, Data Mining

IDE: Embarcadero Dev-C++, Code Blocks, VS Code, Atom, Jupyter Notebook, Google Colab, Anaconda

Web Scraping: BeautifulSoup, Requests

Writing Tools: Microsoft Word, Latex (Overleaf)

Version Controle: Git, Github

Teaching: Google Classroom

COMMUNICATION AND INTERPERSONAL SKILLS

- Proficiency in multiple programming languages.
- In-depth understanding of algorithms and data structures.
- Knowledge of web technologies.
- Understanding of operating system concepts.
- Basic principles of cyber security.
- Utilization of software development methodologies.
- Data analysis skills.
- Effective communication.
- Problem-solving abilities.

LANGUAGE SKILLS

- **Arabic** : Mother tongue (Native)
- **French** : Limited working proficiency
- **English** : Basic proficiency

CERTIFICATIONS

- **Create IoT devices using an ESP32 to receive real-time data** - Techmology -
- **Introduction to Python Programming Course** - Dataquest -
- **For Loops and Conditional Statements in Python Course** - Dataquest -

CODING PLATFORMS

- **HackerRank**
- **GeeksForGeeks**
- **Kaggle**
- **LeetCode**