

# Ahmed Boutar

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## EDUCATION

Duke University

*Master of Engineering, Artificial Intelligence*

Durham, NC

Aug 2024 – Dec 2025

- Coursework: Modeling Process & Algorithms, Sourcing Data for Analytics, Alternative Data

University of Rochester

*Bachelor of Science, Computer Science*

Rochester, NY

May 2022

- Minors: Mathematics, Audio Music Engineering; Certifications: AWS Cloud Practitioner
- Coursework: Artificial Intelligence, Design & Analysis of Efficient Algorithms, Data Mining, Database Systems

## WORK EXPERIENCE

Freelance

Tunis, Tunisia

*Consultant, Developer & Team Lead (React Native, Figma, TestFlight, Expo)*

October 2023 – August 2024

- Led a team of 4 in developing a React Native mobile app for the leading radio company in Tunisia (currently 100,000+ downloads); Features include listening and watching live radio shows, account support with favorites
- Directed design phase on Figma, coordinated client communications and feedback implementation, conducted functional testing, and handled app deployment on TestFlight, including managing feedback loops with the client for continuous improvement of app functionalities and UI.
- Spearheaded API integration, which included online radio and video flux resources, coordinating with the client for the modification and creation of API endpoints to meet the app's evolving requirements.

Wetware Biosystems

Remote

*Full-Stack Software Engineer (Technologies used: MERN stack, Git)*

January 2023 – July 2023

- Designed and implemented a full-stack web application built using React, Node.js, Express, and MongoDB from scratch, allowing the company to manage the devices they manufacture; used Redux for state management
- Designed and implemented a RESTful API to access and use data from the Mongo database
- Developed a calendar feature that allows users to schedule events and for Admins and Managers to schedule device inspections
- Implemented a basic Auth workflow using the bcrypt library and JWT; created the data models and the database schema

JD Software

Salem, Massachusetts

*Junior Software Engineer (Technologies used: Angular, Postgres, TS, JS, C#).*

August 2022-January 2023

- Designed and built an upload feature on the ASP .NET App to update users' information across different SQL tables from an existing excel sheet, improving workflow and saving the Deputy Director of Accounting of the Massachusetts Department of Health 2 hr/week
- Designed and configured meta-data for all of Massachusetts Controlled Substances Registrations to digitize them, allowing health professionals to apply for them online; Ensured regulations were properly followed in terms of data storage and handling sensitive information
- Discussed different project requirements with the Department of Health officials and translated them to the team into SQL operations to ensure proper implementation of the different licenses issued in accordance to the CFR regulations

Polly (DealerPolicy)

Burlington, Vermont

*Software Engineer Intern (Technologies used: C#, React, TS, Git, Azure; Worked in Agile team)*

May 2021-August 2021

- Designed and built internal features for workflow optimization, saving internal customer service 10 minutes per payment request
- Introduced and updated existing API allowing clients to safely access users' data, added back-end logic to offer reporting and analytics
- Created migration scripts to transfer data across Azure storage tables to preserve data integrity (6,000+ entries per migration)
- *Internal hackathon:* in a team of 2, created PowerShell scripts to automate the sending and receiving of coding challenges to potential candidates, saving the manager about 15 minutes per candidate

## SELECTED PROJECTS

- *HomeEcon (JS, Python):* In a team of 3, designed and implemented a web app for Wegmans' customers to easily scan their available ingredients and receive recipe recommendations; app would return recipe with the least number of missing products in case of a no match
- *Factors Contributing spread of COVID (Python):* Built dataset from scratch containing different environmental factors (e.g precipitation) in all US counties and rates of infection; Used a linear regression model to determine the factors that contribute the most to the spread of COVID-19

## SKILLS & INTERESTS

**Programming languages & technologies:** Python, Angular, Java, JS, TS, Postgres, MySQL, Swift, Azure, Node JS, AWS, React, Express, MongoDB, Mongoose, Flask, Docker, Pandas; **Languages:** Native in Arabic; Fluent in French, English; Intermediate in Italian