

Mustafa Abdallah Mohamed

Backend Engineer | Django, Flask, Python | Node.js, Express.js, TypeScript

Mobile: +20 112 563 9036
mustafa.abdullah@gmail.com

linkedin.com/in/mustafaabdullah || github.com/mstva
www.upwork.com/freelancers/~01827d2d94f6d3cbd6

Summary

A backend engineer graduated from computer engineering school, worked as a freelancer on Upwork after graduation and became a Top-Rated Plus with 100% job success in less than one year! Get a chance to work with clients from around the globe from Ireland, Canada and the United States because of good English communication and flexible time and timezone. Gain the trust of clients by expanding the contracts for a long-term relationship for more than one year! While delivering high quality and professional work.

Flexible to learn new things and move fast between programming languages. Worked in parallel on multiple projects with different tech stacks. Also as a learning project, I implemented some of the design patterns mentioned in the “Head First Design Patterns” book using C++, Java, Kotlin, JavaScript, Python and Ruby!

So here is what I can do as a backend engineer:

- Building backend APIs from scratch with Python/Django, Flask and TypeScript/Node.js.
- Writing clean architecture, reusable and maintainable code with the MVC architecture pattern.
- Deploying the backend APIs to Digital Ocean and Heroku.
- Documenting, testing and designing the backend APIs using Postman.
- Fixing bugs, debugging and testing until everything working as expected.
- Using terminal for daily programming tasks, within a Linux/macOS environment.
- Organizing my development process with Agile and using Jira for project management.
- Keeping track of my code with version control using Git and GitHub.

Hobbies: besides being a software engineer, I spent my time drawing, writing, and enjoy watching sci-fi movies,

Experience

Backend Engineer - Medicore Medical Services - Dublin, Ireland

Jan. 2021 to March 2022

Medicore Medical Services (www.medicore.ie) is an ambulance service where the hospitals call them to provide an ambulance to transfer a patient from the incident place to the hospital. They built CrewTech to connect the manager with the ambulance's crew. CrewTech is a dashboard for managers to add calls and forms, and an Android app for the crew to see the calls and forms they need to fill.

It was only me in the software engineering team working directly with the manager! Where I worked on refactoring the old code, adding new features, and fixing some bugs. Worked on the app with Android/Kotlin, on the backend API with Python/Django and on the frontend dashboard with TypeScript/React.js.

For the backend API, here is what I did:

- Refactored the backend API that was written with Python, Django and PostgreSQL.
 - Added new features and made the code reusable, and reliable with the MVC architecture.
 - Developed a device manager to make admin manage registered devices.
 - Built a form builder and connected it to the backend API.
 - Developed a crew and admin authentication system.
 - Tested and documented the API using Postman.
 - Deployed the backend API on Heroku for testing and on Digital Ocean for production use.
 - Organizing the work with Agile, Jira, Git and GitHub.
 - Integrated the Backend API to their React Dashboard and Android App.
-

Backend Engineer - Itesyl Technologies - Nairobi, Kenya

Apr. 2021 to Feb. 2022

Itesyl Technologies (<https://itesyl.com>) is a company that develops business banking solutions, they build Kodeec to connect the real state with e-banking by connecting landlords and apartment owners with tenants and banks.

Our team was two people building the Kodeec project, my job was working on adding features to backend API with Flask/Python, building an app with Flutter/Dart and building a WhatsApp chatbot using Node.js/TypeScript.

For the backend API, here is what I did:

- Added new features to a backend API written with Flask and PostgreSQL.
- Handled background tasks and caching API responses to reduce database queries.
- Used Twilio and local SMS providers to send SMS to users.
- Built a Fingerprint and PIN Authentication system with a two-factor feature.
- Generated PDF files and sent Emails to users based on user filters.
- Tested and documented the API using Postman.
- Organized the work with Agile, Jira, Git and GitHub.
- Deployed the backend API on Heroku for testing.
- Integrated the API to their mobile application that was built with Flutter.

Education

B.S. Computer Engineering - Minia University - Minya, Egypt

Sept. 2015 to Aug. 2020

Minia University is a local university in Egypt that serves students from the Minia government, I was studying in the faculty of engineering and specialized in the computers and systems engineering department. After five years of studying, we ended up with a graduation project, and mine was called “Hafyz”.

Hafyz is a smart Android assistant app for Alzheimer's disease patients! We worked as a team of five students where we needed to develop this application using Android and Java, the app has three main features: face recognition for helping patients recognize people who forgot them, a location tracker for tracking patients' locations in case they are lost and a personal assistant for answering patients' questions.

My part was working on the face recognition feature and here is what I did:

- Wrote and analyzed the requirements document, to generate use cases and user stories.
- Designed the user interface with consideration of Computer-Human Interaction guidelines.
- Built a face recognition system with the face_recognition library which has a 99.38% accuracy.
- Developed the backend REST API using Flask which hosted the face recognition system.
- Deployed the Flask server on Heroku which led to reducing the time of testing.
- Implemented the frontend in Android Studio using Java with the support of Camera & Gallery.
- Organized the development process with Agile/Scrum and version control with Git & GitHub.
- Led the team with distributing the tasks and following up on the progress of building the app.

The project code is on GitHub at github.com/mstva/Hafyz and as a demo at vimeo.com/456017663

Skills

Python	Heroku	Design Patterns
Django	Digital Ocean	API Integration
Flask	Git	RESTful API
PostgreSQL	GitHub	Linux/macOS
JavaScript	Agile	Docker
Node.js	Jira	Java
Express.js	Postman	Kotlin
MongoDB	Firebase	MySQL

Projects

Design Patterns - <https://github.com/mstva/DesignPatterns>

Implementation of design patterns mentioned in “Head First Design Patterns” book using C++, Java, Kotlin, JavaScript, Python and Ruby.

SovirApp - <https://github.com/mstva/SovirApp>

eCommerce app using React Native as the frontend and Node.js & MongoDB as the backend

Skills & Tools: React Native, Expo SDK, TypeScript, React Native Navigation, Axios, Node.js, Express.js, MongoDB, Firebase, JSON Web Token, Bcrypt.js, Multer.js, Heroku

Volunteering

Social Media Marketing Specialist - IEEE Minia University

Nov. 2017 to April 2018

IEEE Minia University is a student branch at the Minia University at the faculty of engineering, under the name of the global organization IEEE, where volunteers organize competitions, workshops and events for inspiring people about technology, business and creativity!

I volunteered in the social media team, and our team consisted of three people, we were working together to create content and publish news, events and competitions about the branch, my job was creating content, managing the social media channels and covering the events during it happens.

During my volunteering, I worked on multiple projects at IEEE MU and here is what I did:

- Created the event description of “Hot Wheels” which was a competition for Robots.
 - Covered the “Problem Solving Competition” event which was a competition for programming.
 - Planned and created the event “Line Follower 2018” which was a competition for Robots to follow a line.
 - Worked as a content creator and covered their big event with my team called “Innovation Day7” it was three days event in the seventh year of its creation, where a lot of speakers, competitions and workshops come together in one place to talk about technology, business, and creativity to inspire students!
-