

Erdison Malko

📍 Tirana, Albania ✉ erdisonmalko@gmail.com ☎ +355 69 6636383

👤 ABOUT

Backend Developer with three years of total work experience, proficient with Flask Django, NodeJS (ExpressJS), skilled in integrating APIs, managing databases, and automating solutions, with a background in IT support handling web application issues and Data Analysis creating data reports and workflows.

💼 PROFESSIONAL EXPERIENCE

03/2023 – present
Tirana, Albania

Python Backend Developer, Webhelp

Developed and maintained a internal-use-only chatbot application with text and audio input/output capabilities, tailored to provide department-specific responses based on user roles, using Flask and SQL Server.

- **Backend Development:**
 - Designed and implemented a secure backend using Flask, incorporating SQL Server for database management to handle user authentication, role-based knowledge base selection, message storage, and retrieval.
- **Real-Time Communication:**
 - Integrated WebSockets to enable seamless real-time interaction between users and the chatbot, ensuring smooth communication with minimal latency.
- **Audio Features:**
 - Developed and optimized backend services for processing audio input/output, ensuring low latency and high reliability.
- **OpenAI Model Integration:**
 - Utilized OpenAI APIs to handle user queries by leveraging pre-loaded knowledge bases, enabling the chatbot to deliver human-like, accurate responses tailored to the user's department or role.
- **Caching and Optimization:**
 - Improved application performance and scalability by implementing Flask-Caching and Redis to reduce redundant database queries and optimize response times.
- **Frontend Development:**
 - Built a clean and responsive user interface using HTML and Bootstrap for structure and styling, ensuring an intuitive user experience.
 - Wrote custom JavaScript to handle server calls, manage audio input/output functionalities, and dynamically update the interface without page reloads.
 - Ensured consistent application performance across various browsers and devices.
- **Testing:**
 - Conducted unit testing and API validation using Postman to maintain code reliability and robustness.
- **Cloud Deployment and Version Control:**
 - Managed version control with Git and GitHub, deploying the application on Azure Web App for scalable and secure operations
- **Additional Contributions:**
 - **Automated data manipulation** and processing tasks using Python modules like os and pandas.
 - Performed **web scraping** using Selenium and Requests to gather data from internal tools and websites, supporting data-driven decision-making.

11/2022 – 03/2023
Tirana, Albania

IT Support 2° Level, Sisal Group [↗](#)

- Managed and resolved web application (UI) issues impacting end-user experience, ensuring timely and effective solutions.
- Diagnosed and analyzed problems by reviewing system logs, identifying root causes and implementing appropriate fixes.
- Utilized tools such as Kibana (Elastic Stack) for log analysis and DBeaver for database query and verification, supporting issue resolution processes
- Escalated identified bugs and technical issues to the Production Team for further investigation and resolution
- Communicated resolutions and provided feedback to end customers through customer care channels, ensuring clear and efficient information delivery.

07/2021 – 10/2022
Tirana, Albania

Data Analyst, Impala Digital [↗](#)

- Created Google Sheets/Excel templates and reports using advanced formulas like QUERY, ImportRange, and VLOOKUP.
- Developed and maintained R scripts to analyze data and present it on Excel dashboards.
- Designed and implemented workflows and training materials for new processes, facilitating efficient adoption and execution within the team
- Analyzed large sets of financial transaction data, producing detailed reports for stakeholders and supporting informed decision-making.
- Presented detailed monthly balance reconciliations to the Finance Department, ensuring accuracy and transparency in financial reporting.
- Applied technical expertise and proficiency with data analysis tools to improve team performance and streamline data management processes.

PROJECTS

03/2023 – 04/2023

Online Portfolio, Personal Website [↗](#)

This project is a portfolio website that build with HTML, CSS and JavaScript.

Chat App [↗](#)

Build using Express.js for the backend, vanilla Javascript for the frontend and Mongo DB and Redis for the database.

GitHub Link [↗](#)

Link to Github repositories to view more projects.

COURSES

08/2022 – 03/2023
Tirana, Albania

Python from Scratch, SDA Academy [↗](#)

Python from the basics.

SKILLS

Python | SQL | Django | Web Scraping | Flask | REST APIs | Express.js | MongoDB | React

LANGUAGES

Italian | English