Erdison Malko

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💼 PROFESSIONAL EXPERIENCE

05/2025 – Present
Tirana, Albania

Software Data Engineer, *Raiffeisen Bank Albania* 🔗

- Build and maintain scalable data pipelines on Databricks (AWS) using PySpark, including both batch and streaming workloads, ensuring reliable, low-latency, and high-availability data delivery for business and analytics teams.
- Write and optimize Python, SQL, and Bash/PowerShell scripts for data processing, validation, and automation.
- Orchestrate and schedule data workflows using Airflow, ensuring reliable pipeline execution and monitoring.
- Use Git/GitHub for version control, code reviews, and collaborative development.
- Contribute to and maintain CI/CD pipelines with GitHub Actions, supporting automated deployment of Databricks Bundles.
- Collaborate with stakeholders to translate business requirements into robust, production-ready data solutions.

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.

🧠 SKILLS

Python | SQL | Django | Web Scraping | Flask | REST APIs | Express.js | MongoDB | Databricks | Bash | PowerShell | Spark

📂 PROJECTS

03/2023 – 04/2023

Online Portfolio, *Personal Website* 🔗
This project is a portfolio website that build with HTML, CSS and JavaScript.

GitHub Link 🔗
Link to Github repositories to view more projects.

📖 COURSES

08/2022 – 03/2023
Tirana, Albania

Python from Scratch, *SDA Academy* 🔗

🌐 LANGUAGES

Italian | English