Alexandre Silva

+351 968 482 288 | alex_24vc@live.com.pt | linkedin.com/in/alexandrefssilva

EDUCATION

Faculty of Sciences - University of Porto Porto, Portugal
*Bachelor in **Computer Science*** *Sep. 2020 – June 2023*
- GPA of 16

Porto Accounting and Business School - ISCAP Porto, Portugal
*Bachelor in **Accounting and Administration** with a Master's in **Auditing*** *Sep. 2017 – June 2023*

Faculty of Informatics - Masarykova Univerzita Brno, Czech Republic
Exchange student *Sep. 2022 – Fev. 2023*
- Completed courses in **Advanced Computer Security Topics**, **Microchip Controllers**, and **GPU Parallel Programming**.

EXPERIENCE

Tech Consultant September 2023 – Present
Deloitte *Lisbon, Portugal*
- Developed **banking functionalities** for a new youth-focused bank using **Java** and the **Spring Framework**.
- Optimized processes by implementing **multithreading** parallel processing in Java services, reducing task completion time and enhancing system efficiency.
- Enhanced system performance and modularity by implementing specialized banking logic with **AWS Lambda** functions in **Go**.
- Accelerated build and deployment processes by establishing robust CI/CD pipelines using **GitHub Actions** and **Docker**.
- Improved deployment speed and consistency by automating configuration management across environments with **Python** scripts integrated into the **CI/CD** pipeline.
- Ensured platform scalability and reliability by deploying microservices on **AWS** using **Docker** containers.
- Collaborated with cross-functional teams to discuss requirements and implement best practices, ensuring optimal solution delivery.

PROJECTS

Security Analysis of MIFARE Classic Smart Cards | *Android, NFC, Cryptography* 2022
- Conducted a security assessment of the **MIFARE Classic** smart card used for student residence access by utilizing an **Android** smartphone's NFC capabilities.
- Presented findings and **recommendations for improved security measures**.

GPU-Accelerated Computations with CUDA | *CUDA, C++, Parallel Computing* 2023
- Implemented parallel algorithms using **CUDA** to accelerate computational tasks, achieving very significant **performance improvements** over CPU-only implementations. Explored optimization techniques for **memory management** and **thread synchronization** to maximize GPU efficiency.

CERTIFICATIONS

Google Cloud Digital Leader | *Google* Dec. 2023
- Gained foundational knowledge in Google Cloud Platform and cloud computing concepts

Java SE 17 Developer | *Oracle* Nov. 2023
- Validated proficiency in Java SE 17 and experience with core Java programming concepts

English Proficiency | *EF SET* 2022
- Certified English proficiency in written, listening, and spoken skills

TECHNICAL SKILLS

Languages: Java, Go, Python, C/C++, SQL
Frameworks: Spring, JUnit
Developer Tools: Git, Docker, AWS, Google Cloud Platform