

Henrique Faria

Software Engineer

Email : hbsfaria@gmail.com

Phone : 927374581

EXPERIENCE

- **Atlanse** Viana do Castelo
Software Engineer *August 2018 - Today*
 - **Microservices:** Spring Boot microservices' design and development in a distributed high availability systems architecture. SOAP and REST requests integration, batch processing, and optimization of JPQL queries.
 - **In-depth analysis and design:** Design solutions for potential issues such as implementing a parallel system using Nginx and njs to test and correct a new system and developing a cache component for Mule 4.2 CE. A member of multiple migration teams, for example, on-premises microservices to Google Cloud using Kubernetes, Oracle to Postgres, and Mule 3.8 EE to Mule 4.2 CE.
 - **E-commerce applications:** Symfony 4 project with order processing, integration with Paypal, and a simulator that calculates the best solar panel alternative based on geolocation and external API data.
 - **Miscellaneous applications:** Development of solutions for minor retail stores and an escape game management application. All projects use NodeJS and Express for backend, and Angular 8 for frontend.
- **Atlanse** Viana do Castelo
Academic Project *September 2017 - July 2018*
 - **Web Application:** Angular application that generates QR codes, and handles minor functions such as file uploading and image resizing.
 - **Augmented Reality:** Mobile application developed in Ionic that recognizes bi-dimensional objects in real-time and presents information using the Cordova Wikitude plugin.

EDUCATION

- **Polytechnic Institute of Viana do Castelo** Viana do Castelo
Masters in Cybersecurity *September 2019 - 2021*
 - **Thesis:** An Advertising Overflow Attack on Android Exposure Notification System Impacting COVID-19 Contact Tracing Applications
 - **Advertising Overflow:** Uncovered a novel Denial of Service attack, Advertising Overflow, on Exposure Notification systems that affects all Android mobile devices. Development of malicious Android apps that use Bluetooth to affect the contact tracing feature of Exposure Notification.
 - **Mentions:**
 - * **Publications:** [IEEE Access Journal](#) [↗](#) ,
 - * **Media Mentions:** [Publico](#) [↗](#) , [Sábado](#) [↗](#) , [Diário de Notícias](#) [↗](#)
 - * **Google Bughunter:** [Honorable Mention](#) [↗](#)
 - * **SASYR 2021:** Best Research Paper Award
- **Polytechnic Institute of Viana do Castelo** Viana do Castelo
Bachelors in Computer Engineering *September 2015 - July 2018*

PERSONAL PROJECTS

- **Digital Forests:** Android mobile application and server developed for the contest "Eco-Escolas". It shows the information e geolocation of interest points of Viana do Castelo's trails with an offline first approach. It uses a NoSQL database, Couchbase, and it has the automatic replication feature to allow offline usage.
- **GISMaps:** Management and visualization of geometrical elements in a map through an Angular application and an Ionic mobile application. It uses spatial extensions (PostGIS) and a a Geoserver.

TECHNICAL SKILLS

- **Programming:** *Java*, *NodeJS* and *SQL* for server-side development; *Javascript* for front-end; *Python* for scripting

Technologies: Docker, Jenkins, RabbitMQ, Mulesoft, Nginx, Postgres

LANGUAGES

- **Portuguese:** Native
- **English:** Good
- **Spanish:** Basic