

## EDUCATION

**B.S. in Computer Engineering, IPL - Polytechnic of Leiria** Sep 2020 – currently  
Relevant Coursework: Enterprise Application Architecture, Artificial Intelligence, and Algorithms and Data Structures.

**Short Cycle (TeSP) in Web Development and Multimedia, IPL – Polytechnic of Leiria** Sep 2018 – Jul 2020  
Relevant Coursework: Web Server Programming and Client-Server Web Programming.

- Web Development and Multimedia (2nd Year Final Project) – Take a Book, Final Project Winners.
- Web Development and Multimedia (1st Year Final Project) – AgroExpansion, Final Project Winners.

**IT Equipment Management Technician, Val do Rio Vocational School** Sep 2014 – Jul 2017  
Relevant Coursework: Microprocessor Architecture and Programming.

- Erasmus+, Scholarship – Merit Student, Portsmouth, England – From February to July 2017.

## PROFESSIONAL EXPERIENCE

**Student Researcher at IPL - Polytechnic of Leiria - CIIC** Feb 2023 – currently, Leiria, Portugal

- Developed and implemented a Deep Neural Network to detect Cyber Attacks in IoT Devices, by selecting and processing data sets, identifying and applying machine learning techniques, and refining models.
- Prepared detailed scientific reports documenting research findings, including test runs, evaluation of alternatives, and analysis of results.

**Languages:** Python. **Framework:** Tensorflow. **Github:** [Link](#).

**Junior Full Stack Developer Intern at WayAcross** Feb – Jul 2020, Leiria, Portugal

- Completed a full-stack web development project for an advertising company.
- Contributed to creating a user-friendly tool for building professional business websites through streamlined form completion and automatic template generation.

**Languages:** PHP and JavaScript. **Framework:** Code Igniter.

**Assistant Professor and Tutor at University of Portsmouth** Jun – Jun 2017, Portsmouth, England

- Invited to mentor students in developing an Android GPS tracking application.
- Assisted first-year university students in learning web development as a tutor.

**CMS Developer and IT Technician Intern at Infonetmedia Ltd** Feb – Jun 2017, Portsmouth, England

## SKILLS

**Proficient with:** Java, PHP, and C#.

**Familiar with:** Python, C, SQL, and JavaScript.

**Tools/Frameworks known:** Linux, Git, Java EE, Android Studio, Laravel, and Unity.

## SELECTED PROJECTS

**MyGarden – Final Grade: 20**

- Developed an IoT solution for a fully autonomous vegetable garden inside a container.
- Implemented sensors and actuators to collect data from the environment and control the system.
- Developed a web application using an API to communicate with the devices and visualize the data.
- Enhanced security with a facial recognition AI model and a card reader.

**Languages:** Python, JavaScript, SQL, and PHP. **Framework:** Laravel. **Software:** Cisco Packet Tracer. **Github:** [Link](#).

**Insured Asset Management System (IAMS) – Final Grade: 20**

- Developed the back end of an enterprise application in Java EE to optimize the incident management process for insured goods.
- Integrated the application with insurers' APIs to fetch customer insurance contracts/policies.
- Streamlined the management of occurrences in insured assets, potentially saving time and resources for insurers, experts, repair services, and customers.

**Languages:** Java. **Framework:** Java EE. **Software:** Docker, MockApi. **Github:** [Link](#).

**Fastuga Driver – Final Grade: 18,4**

- Developed an Android app for drivers similar to Uber Eats.
- Created backend system with Restful API using Laravel framework.
- Developed and implemented Restful API with Retrofit and Node.JS WebSocket server to communicate with Laravel database.
- Incorporated Google Maps API to display delivery paths and calculate distance and time of delivery.

**Languages:** Java, PHP, and SQL. **Software:** Android Studio, Docker, Laravel, and Node.Js. **Github:** [Link](#).

**Mummy Maze AI – Final Grade: 16**

- Created AI entities that could independently solve the game and use various strategies for success.
- Implemented mechanics using multiple search algorithms for adaptability to different game roles.

**Languages:** Java. **Github:** [Link](#).