

# DAVID CRUZ

## Software Developer

### Bachelor's Degree in Computer Science and Engineering

Contact: +351 937 067 602

Email: davidcruz@live.com.pt

Location: Lisbon, Sintra

Github: [github.com/dvd-cruz](https://github.com/dvd-cruz)

Linkedin: [linkedin.com/in/dvdcruz](https://linkedin.com/in/dvdcruz)

Website: [dvd-cruz.github.io/](https://dvd-cruz.github.io/)

I'm always **eager to learn** and take pride in being **responsible, efficient, and punctual** in my work. I'm comfortable **communicating and working within a team** while still **being autonomous** when the situation requires it. I am **capable of working well under pressure** and **I learn new tools with ease**. Technology has been a part of my life for as long as I can remember, and that early interest has grown into a **passion for computers and science**.

## Academic Background

### Bachelor's Degree in Computer Science and Eng.

Instituto Superior Técnico

(Completed 2024)

Hands-on projects enhanced my **problem-solving** and **teamworking** skills. I studied various programming languages, **algorithms**, **data structures**, and computer architecture, preparing me to tackle complex challenges in the field of technology.

### Master's Degree in Computer Science and Eng.

Instituto Superior Técnico

(In progress)

**Specializations:** Artificial Intelligence and Cybersecurity. I am currently learning about these topics and am curious to see how they translate to solving real-world problems.

## Technical Skills

### Programming - Java, Python, C and C#:

- Proficiency in **algorithms**, **structures**, and **design patterns** from several **object-oriented projects**.
- Java**: Spring-boot, Hibernate and others.

### Machine Learning and Data Science:

- Developed **classification** and **neural network models**.
- Python**: Sklearn, Pandas, TensorFlow and PyTorch.
- Data visualization with matplotlib.

### Web Development - HTML, CSS and JavaScript:

- Implemented a website simulating a smartwatch interface.
- Developed a personal resume website from scratch.

### Version Control and Git:

- Facilitated parallel development: **branches** and **pull requests**.
- Maintained code integrity within shared team repositories.

### Databases – Microsoft SQL Server and Pentaho:

- Designed **databases** and **data warehouses**.
- Efficient **queries** and **views** to optimize data retrieval.

### Linux OS:

- Linux command-line tools and process automation.
- Performed tasks such as scripting and package management.

### Other Skills – Microsoft 365, LaTeX, Photoshop, Vegas

## Professional Experience

### Software and AI Developer



(2025 - Present)

- Modernized the infrastructure of a major Portuguese Bank by **developing a GenAI tool to automate code migration**.
- Followed the entire project lifecycle: from **defining the AI architecture** to the development of **unit tests** and **debugging**.
- Agile development** with a strong focus on **teamwork**.
- Implemented a **POC RAG chatbot** on mental health based on World Health Organization guidelines.

### Internship – Java Developer



(2022)

- Developed a **CRUD application** using Java frameworks such as **Spring Boot**, and **Hibernate**.
- Integrated an authentication functionality using the Keycloak platform and tested endpoints with Postman.

### Electrician Assistant

Electro-Nelson & Cruz

- Supported the installation of wiring and outlets while ensuring compliance with safety standards.
- Troubleshoot electrical issues and organized work areas and equipment to maintain a safe environment.

## Extracurricular Activities

### Fansubber

CrowFansub

(Since 2014)

- Team-based translation and subtitling of media content.
- Enhanced **language skills** but also sharpened my **attention to detail**.
- Developed **Lua scripts** to automate repetitive tasks.

### Volunteering at an Animal Shelter

(2020)

- Responsible for the maintenance and care of animal habitats and their environment.

## Languages

**Portuguese:** Native; **English:** C2.