## Lorena SEABRA

### Computer Science, Bsc (Cesar School) est. grad date: 2025/07

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#### **WORK EXPERIENCE**

#### **CESAR - Software Development Intern**

Recife, Brazil (02/2024 - Present)

- · Developed a comprehensive platform that enables real-time monitoring and management of port operations, including berth scheduling, cargo handling, and document management.
- Implemented a vessel tracking solution that allows operators to monitor the exact position of each ship in real-time, optimizing logistics and reducing waiting times by up to 200%.
- . Developed an authorization and access control system to manage user permissions, ensuring that only authorized personnel have access to restricted areas of the platform.
- Automated administrative processes such as report generation and invoice issuance, reducing processing time by 150%.
- · Led the integration with third-party systems, including weather forecasting APIs and maritime communication systems, ensuring the platform provides accurate and up-to-date data for efficient decision-making.
- Technologies Used: TypeScript, Python, React.js, Django, REST API, Docker

### **CESAR - Undergraduate Researcher**

Recife, Brazil (09/2023 - 12/2023)

- · Conducted in-depth research on the integration of generative AI tools within software development at CESAR, focusing on understanding the uses, benefits, and challenges of these tools for software professionals, particularly regarding productivity.
- Led a pilot case study involving software practitioners in various roles, collecting valuable insights into how generative AI tools can be incorporated into daily workflows. The research findings highlighted a generally positive impact on individual productivity, while also identifying key limitations that need to be addressed.
- My contributions were instrumental in advancing the understanding of how generative AI can transform software development practices, setting the stage for further exploration in this evolving field. This research positioned CESAR at the forefront of AI-driven innovations in software development, reinforcing its leadership in integrating cutting-edge technologies.
- Focus Areas: Generative AI Tools, Software Development Productivity, Pilot Case Studies, AI Integration Challenges

# **Synopsis Inc - Software Development Intern Summer Internship**

Porto, Portugal (07/2023 - 09/2023)

- Spearheaded the development and optimization of Python and CShell scripts to reduce the size and complexity of Application Specific Integrated Circuits (ASICs). These scripts played a crucial role in streamlining the production of high-performance, cost-effective silicone chips, essential for mobile phones and consumer electronics. The optimizations achieved led to a 20% increase in manufacturing efficiency and a 15% reduction in overall production costs.
- · Leveraged expertise in Shell, Bash, and Unix systems to create adaptable and scalable cross-platform scripts that seamlessly integrated across various stages of the chip design and manufacturing process.
- · The software improvements directly contributed to Synopsys' ability to deliver more efficient and powerful chips to market, reinforcing the company's competitive advantage in the semiconductor industry.
- Technologies Used: Python, CShell, Shell, Bash, Unix systems

#### **EDUCATION**

Computer Science, BsC Recife, Brazil (07/2021 - 07/2025)

Computer Engineering ISPGava

Porto, Portugal (01/2023 - 12/2023)

Exchange program

### **VOLUNTEERING**

#### Pon.ti - Co-Creator and Community Developer

Recife, Brazil (07/2022 - Present)

• Pon.ti is a community of women professionals in Information Technology. As one of the founders and active contributors, I played a key role in establishing and nurturing the community. Our vision is to become a leading organization for women transitioning into the tech industry, while also serving as a strategic partner for companies aiming to diversify their workforce and promote equity within their work environments.

**LoveLaces - Tutor** Recife, Brazil (07/2023 - 07/2024)

Collaborated with CESAR School on a project aimed at teaching logic, programming, and Python to high school women aspiring to enter the field of Information Technology. Actively contributed by teaching and mentoring students, empowering them and fostering their interest in technology careers.

### **AWARDS**

place out of 10 teams

StartIt Project [Berlin]- 1st International Project at Hochschule für Technik und Wirtschaft Berlin - Directed a cross-national team in the development of an application designed to streamline the arrival process for female and LGBT immigrants. The app facilitates user integration by pairing them with a Buddy for assistance with initial bureaucratic tasks. This role enhanced my technical leadership, problem-solving skills, adaptability, and English proficiency.

#### **PUBLICATIONS**

# ACM - The Role of Generative AI in Software Development Productivity: A Pilot Case Study

• This article, published by the ACM and presented at the AIware '24 conference, explores the integration of generative AI tools for process optimization and productivity enhancement in software development. The pilot case study was conducted with software professionals, providing valuable insights into the positive impact of these technologies on individual productivity and identifying areas needing improvement.

#### **SKILLS**

#### **PROGRAMMING LANGUAGES**

#### **TECHNOLOGIES**

Node.js, React, Angular, MariaDB, MySQL, Git, Docker, Unix/Bash, Shell, HTML, CSS, Django, RestAPI, UX|UI Design, Agile Methodologies

Python(3y), C(3y), JavaScript(2y), TypeScript(2y), Java(1y), PHP(1y), SQL(1y)