# Alejandra J. Perea Rojas

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### **EDUCATION**

**Harvard University** Cambridge, MA

- Bachelor of Arts in Computer Science; Secondary in Physics.
- Relevant projects:
  - Turing-complete OCaml interpreter, a C++ mini-OS WeensyOS, a bash shell in C++, and a Python Ghost AI.
- Relevant coursework:
  - Systems Programming (CS61), Artificial Intelligence (CS182) Abstraction and Design in Computation (CS51), Intro to Algorithms (CS120), Applied Linear Algebra (AM120), Intro to Probability (STAT110).

### **EXPERIENCE**

## **Quantum Software Developer**

May-Aug 2023

**IBM** 

Yorktown Heights, NY

Anticipated: May 2024

- Parametric Update, Observability
- Qiskit Early Access Program + Refactoring
- Conan+CMake

# Co-Founder & Lead Software Engineer

Apr-May 2023

**ENTREVISTA** 

Apr-May 2023

- Developed, tested, and launched the MVP of EntrevistaAI, an AI-powered chat-bot and simulation platform for consulting case-interviews. Designed the product and technical strategy to deploy a scalable and secure platform on AWS.
- Became a Y-Combinator VC finalist and raised \$5,000 in pre-seed funding. Recruited additional engineers to the team.

**Software Engineer** 

Jun-Dec 2022

HARVARD UNIVERSITY

Cambridge, MA

- Revamped Teamcore's PAWS SMART API by programming a HTTP interface in Python that expedited bundled requests, which would be useful for testing and error handling. To verify results, crafted 15 artificial parks in QGIS and Azure
- Started a program that could help automate the process of error checking and data cleaning for the PAWS SMART API.

**Tech Intern** May-Aug 2022

WILDLIFE CONSERVATION SOCIETY

Remote / NY

- Developed an article processing interface with Python and SQL that could help parse 1,000+ articles from both Google News and Google Scholar to assist in the development of the WCS Library.
- Researched and drafted an 8-page white-paper on state-of-the-art AI video processing and conservation tools.

### ACTIVITIES

**Teaching Fellow** 

Sep-Dec 2022 Cambridge, MA

• Facilitated a Systems Programming class of about 200 students by section and office hours of 20+ students.

- Covered 6 topics using C++ and GNU: data memory and representation, assembly, kernel, caching, shell, and threading.

## **DIB Advocacy Director**

HARVARD UNIVERSITY

Aug-Dec 2022

HARVARD WOMEN IN COMPUTER SCIENCE

Cambridge, MA

 Oversaw and collaborated with 8 members on initiatives to promote diversity and inclusion and organized events to provide more resources to underrepresented groups.

#### SKILLS

**Programming:** Proficient (3+ years) in Python and C++. Experienced (1+ years) with Go, Java, OCaml, and SQL.

**Development:** Proficient (3+ years) in HTML/CSS. Experienced (1+ years) with PHP, JavaScript, TypeScript, and React.

Environments: Skilled with Azure, AWS, Docker, Qiskit, OpenAI, Linux, MATLAB, GNU, and Assembly.

**Language:** Fluent in Spanish (native), intermediate in Mandarin Chinese, and elementary in Japanese.