Manuel José Rodríguez Cruz

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Profile

Computer Science graduate from PUCMM with Java experience and a passion for learning. I enjoy growing through projects and teamwork, with interests in programming and data science and hands-on experience in Flutter and Java.

Professional Experience

ClimaCall

Intern *Dec. 2025 – May 2026*

- Developed environment-switching functionality and screens for payments, invoices, and estimates.

Lead Mobile Developer *May 2026 – Present*

- Lead the Flutter mobile development team, reviewing code and promoting development best practices.
- Integrated HERE services for maps in the mobile application.
- Work on consuming the backend API from the mobile application.

Stack: Flutter, Dart, Firebase, HERE.

University Research

Internship, FONDOCYT–LLM project *Jul. 2025 – Present*

- Contribute to speech-to-text (STT) pipelines with Whisper/NeMo, resumable runs, and WER/CER metrics.
- Developed experimental text-to-speech (TTS) pipelines with XTTS-v2 to generate synthetic data.
- Implemented collection and file-based storage of real and synthetic audio, with metadata and source provenance.

Stack: Python, Whisper, NeMo, XTTS-v2, FFmpeg. VIEW REPOSITORY

Degree Project

Co-author and Developer, Socratic Tutor *Jan. 2026 – Jul. 2026*

- Co-developed a Socratic tutoring platform that teaches programming through guided questions.
- Integrates LLM orchestration, conversational memory, tools, guardrails, and class-scoped RAG with pgvector.
- Supports formative activities, instructor reports, and institution- and class-scoped access control.

Stack: Java, Spring Boot, Vaadin, Spring AI, PostgreSQL/pgvector. VIEW REPOSITORY

Education

Pontificia Universidad Católica Madre y Maestra (PUCMM) *Sep. 2022 – Sep. 2026*

Bachelor's degree in Computer Science

- Graduated on September 12, 2026.
- Meritorious-student recognition from the School of Telematics Engineering and Computer Science.
- Microcertification in Data Science.

English: C1 Advanced EF SET: 64/100 *Nov. 10, 2026*

Technical Skills

Languages: Java, Dart, Python, C, JavaScript
Technologies: Flutter, Firebase, HERE, Spring Boot, Vaadin, Spring AI, PostgreSQL/pgvector, MongoDB, Git, GitHub, Linux, Jupyter Notebook, Tableau, Power BI.

Technical Community

Public Relations & Tutor, Computer Science Student Committee *2024 – Jan. 2026*

PUCMM, Santiago, Dominican Republic

- Tutored C programming and led workshops on pointers, dynamic memory, structures, and file handling.
- Supported logistics at Barcamp PUCMM, a community tech conference; gave Girls in Science Day talks.