

JOAQUIN FRANGI

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Miami, Florida

SUMMARY

CS senior (Dec 2026) with HCI+ML research co-authored at ACM CHI EA '26 and production experience deploying TensorFlow models on embedded hardware. Full-stack across Python/Django, TypeScript/React, PostgreSQL, and Docker.

EDUCATION

Computer Science, B.S. | Florida International University

Jan 2024 – Present

GPA: 3.33

Expected Graduation: Dec 2026

SKILLS

Languages

Python | TypeScript | JavaScript | C | C++ | SQL

Frameworks

Django | React | Next.js | Express | TailwindCSS | TensorFlow

Systems & Tools

PostgreSQL | Docker | Linux | Git | REST APIs | CI/CD (GitHub Actions)

RESEARCH

Undergraduate Research Contributor

January 2025 – Present

Knight Foundation School of Computing and Information Sciences, FIU

Advisor: Prof. Chen Chen

- ▶ Co-author (4 of 9), “Exploring Needs and Design Opportunities for Proactive Information Support in In-Person Small-Group Conversations,” *ACM CHI EA '26* (Extended Abstracts of the 2026 CHI Conference, Barcelona). DOI: [10.1145/3772363.3799279](https://doi.org/10.1145/3772363.3799279)
- ▶ Stabilized and optimized the Azure Speech real-time transcription and speaker-diarization pipeline that feeds supporting-information overlays on the Meta Quest 3S; co-led the user studies (N=10) with the lead PhD student.
- ▶ Co-author on follow-up full paper currently under review at ACM CHI 2026 (Papers track).

EXPERIENCE

Embedded Systems & Software Developer

Dec 2024 – Apr 2025

BioGuard – *Python* | *TensorFlow* | *Raspberry Pi* | *Next.js* | *TypeScript*

- ▶ Led software/embedded integration for an AI-enabled wound-care device (FIU BME senior design team), owning the pipeline from sensor capture to ML inference to clinician dashboard.
- ▶ Fine-tuned a TensorFlow MobileNetV2 classifier with custom preprocessing and augmentation for infection detection, achieving 92% accuracy on the held-out test set; deployed inference on a Raspberry Pi at the edge.
- ▶ Built a Python service on the Pi (serial I/O + automated image capture) and a Next.js/TypeScript dashboard for clinicians to remotely monitor patients and manage device data.

IT Consultant – Contract

Dec 2023 – Dec 2024

T-Soles Insole Systems

- ▶ Developed a Python program to calculate 3D-printer feeding rates (resolving a critical production bug) and led QA for software updates across all North American deployments.

Assistant Facilities Manager

Dec 2022 – Dec 2023

Extra Space Storage

- ▶ Managed a \$500K facility operating budget and reconciled 1,100+ monthly accounts, reducing delinquencies by 10% through systematic audit processes

PROJECTS

Nutrichoice – Team Lead, FIU CS Capstone

Aug 2025 – Dec 2025

Django | *TypeScript* | *React* | *PostgreSQL* | *Supabase* | *Docker* | *Render* | *GitHub Actions*

[GitHub](#) | [Live Demo](#)

- ▶ Led a team of 5 to design and ship v1 of a recipe-recommendation web app to production; implemented the recommender as a constraint-filter + weighted-scoring pipeline over user allergies, diet type, and macro-goal alignment.
- ▶ Designed a Django REST backend against a Supabase-hosted PostgreSQL recipe corpus with macronutrient, allergy, and dietary-preference indexing; schema architected to support a planned v2 upgrade to a learned recommender.
- ▶ Deployed to Render with Gunicorn, Docker-based local dev parity, and GitHub Actions CI.