

# Angel Guanill

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## EDUCATION

**Polytechnic University of Puerto Rico** | B.S. in Computer Science | San Juan, PR

Expected Dec 2026

Affiliations: ColorStack, SHPE, CodePath, HACU, O4U

## SKILLS

**Technical:** JavaScript, React, NodeJS, HTML/CSS, C++, Python, SQL

**Developer Tools:** Git, GitHub, Figma

## PROFESSIONAL EXPERIENCE

**Microsoft** | Redmond, WA

**Software Engineering Intern**

May 2025 – Aug 2025

- Delivered noise-free audio experiences for **~1B monthly PSTN calls** by integrating **noise-suppression ML processor** into the render-side audio pipeline.
- Reduced service **COGS** by **~\$1.1M annually** by shifting noise suppression from server-side to client-side execution, decreasing server infrastructure usage by **10%**.
- Pioneered ML retraining for PSTN calls, developing models that suppressed background noise while preserving on-hold music; presented findings via a team tech talk to upskill engineers in a new domain.

**Software Engineering Intern**

May 2024 – Aug 2024

- Improved audio synchronization and mixing for a new Microsoft Teams feature, increasing remote audio quality by **18%** for **300M+ users** across **1M+ organizations**.
- Optimized C++ code for audio processing and implemented a **ML-based grid search** to tune synchronization parameters, significantly reducing latency.
- Built **Python automation pipelines** to process and transform audio data (MUCH, PCM, WAV) and upload results to Azure, reducing manual processing time by **70%**.
- Conducted **40+** data collection sessions to train **machine learning** model for calculating **Signal-to-Noise Ratio (SNR)** and **Signal Reverberation Ratio (SRR)**, improving mic selection for clearer, reverb-free audio.

**Cyborg Mobile x Microsoft** | Redmond, WA

**New Technologist Intern (PM + SWE)**

Jun 2023 – Aug 2023

- Developed an interactive simulation prototype guiding young adults through realistic **U.S. military** career scenarios and trade-offs, supporting informed decision-making.
- Collaborated within a **5-member**, cross-functional team, applying **design thinking**, iterative prototyping, and **user research** methodologies to deliver a polished project within **7 weeks**.
- Implemented a responsive **React** front-end enhanced with **Bootstrap**, improving user engagement and ensuring a consistent, intuitive UI/UX across devices.

## PROJECTS

**IntelliDocs** | JavaScript, React, Node.js

Nov 2025 - Present

- Built an end-to-end **Retrieval-Augmented Generation (RAG)** system enabling natural-language search and question answering over large document collections.
- Implemented document ingestion, chunking, embedding, and **vector-based retrieval pipelines** to surface relevant context for LLM-generated responses.
- Developed a responsive web interface for document upload and interactive querying, optimizing for **retrieval accuracy, latency, and user experience**.
- Integrated frontend and backend components into a cohesive system, supporting scalable document querying and real-time feedback.

## LEADERSHIP AND PROFESSIONAL DEVELOPMENT

**Management Leadership for Tomorrow** | Career Prep Fellow

Feb 2023 – Mar 2025

- Participated in a selective professional development program for high-achieving talent. Completed business case studies and attended conferences hosted by **TikTok**, **LinkedIn**, **Starbucks**, and **Netflix**, enhancing strategic insights and professional networks.

**ColorStack at PUPR** | Co-Founder

March 2023 – May 2024

- Founded and scaled a supportive CS student community, growing active membership from **0 to 45** within one year.
- Organized professional development workshops to improve career readiness and technical confidence among members.
- Designed and deployed a community webpage using **GitHub Pages**, improving accessibility and member engagement.