Joshua Santiago Ibarra

joshuasantiago111@gmail.com | 787-587-5347 | Puerto Rico | LinkedIn | GitHub

Software Engineer | Full Stack Developer

SUMMARY

Undergraduate researcher with experience in software development, real-time data systems, and mobile application deployment. Currently enrolled in Holberton Coding School's 9-month intensive coding bootcamp, where I am focused on growing my coding skills and building a strong foundation in software engineering.

EDUCATION

Holberton Coding School — San Juan, Puerto Rico February 2026 – November 2026
Certificate – Software Engineering Intensive Program

University of Puerto Rico at Mayagüez — Mayagüez, Puerto Rico August 2019 – August 2024
Completed coursework toward a Bachelor of Science in Software Engineering — Degree not completed

- Relevant Coursework: Advanced Programming, Introduction to Software Engineering, Data Structures, Design and Analysis of Algorithms, Artificial Intelligence

TECH STACK

- Programming Languages: JavaScript, TypeScript, Node.js, Python (pandas, data analysis), C
- Databases: PostgreSQL, MySQL, Supabase
- Frameworks & Tools: React, React Native, Phaser 3, REST APIs, Git/GitHub, Docker, Apache
- Cloud & Deployment: Vercel, DigitalOcean
- Operating Systems: Linux/Ubuntu, Windows, iOS
- AI Tools: Claude, ChatGPT, Gemini 2014 used daily for development, prompt testing, debugging, and workflow design
- Languages: Bilingual 2014 Spanish (Native), English (Fluent)

EXPERIENCE

Typing Kitties (TKIT) 2023 – Present
Personal Project — Browser-Based Typing Game | In Development & Deployed

- Designed and built a browser-based typing game with a custom JavaScript game engine using Phaser 3 and TypeScript/React, featuring scene management, a vintage CRT-aesthetic loading screen with animated progress bars, scanline overlays, and flicker effects.
- Deployed on Vercel with Supabase as the cloud database for persistent storage, and localStorage for local/warm-start state detection.
- Built with: TypeScript, React, Phaser 3, JavaScript, canvas rendering, Supabase, Vercel, localStorage

University of Puerto Rico at Mayagüez — Mayagüez, PR January 2020 – July 2024
Undergraduate Researcher — Open-Source Transit Platform

- Implemented the OneBusAway (OBA) open-source platform to improve real-time public transit information for riders in Mayagüez as part of the NICR-funded "Influencing Traveler Behavior through an Open-Source Platform" initiative.
- Developed REST API-connected backend servers and real-time data analysis tools to improve transit data accuracy and system reliability.
- Published the Travel Transit Tracker mobile application to Android (Google Play) and iOS (App Store), increasing public access to live transit information.
- Co-authored all three federally published technical reports for the project: Phase 1 (NICR, September 2021), Phase 2 (NICR, August 2024), and Phase 3 (NICR, March 2024) — spanning the full four-year research initiative.
- Built with: React Native, Node.js, REST APIs, Docker, DigitalOcean, Apache/SSL, OneBusAway, TransitClock

University of Puerto Rico at Mayagüez — Mayagüez, PR February 2020 – 2021
Undergraduate Researcher — Machine Learning / Data Analysis

- Developed a supervised Machine Learning model to predict e-scooter trip patterns in Mayagüez, contributing to urban mobility and sustainable transportation research.
- Collected, cleaned, and analyzed ridership datasets; applied econometric modeling techniques to study travel behavior and transit usage.
- Built with: Python, pandas

Personal Project — Android App for Autism Communication August 2017 – May 2019
Mobile App Developer
- Designed and developed an Android application that uses AI to provide multiple alternative communication pathways for youth with autism, presented at Society for Science competition.
- Built with: React Native
- Recognized with the Award for Community Innovation (Society for Science and the Public, 2018) and the Office of Naval Research Naval Science Award (2018).

AWARDS & RECOGNITION
- Award for Community Innovation — Society for Science and the Public (2018)
- Intel Excellence in Computer Science Award (2018)
- Naval Science Award — The Office of Naval Research (2018)
- United States Air Force Certificate of Achievement (2017)
- Research Symposium Presenter — January 2017
- Co-author, NICR / U.S. DOT — “Influencing Travel Behavior via an Open-Source Platform” Phases 1, 2 & 3 (2021, 2024)
- Student Member — Sigma Xi, The Scientific Research Honor Society

PUBLICATIONS
- *Influencing Travel Behavior via an Open-Source Platform Phase 3* — NICR / U.S. DOT, 2024. doi.org/10.5038/cutr-nicr-y3-3-7
- *Influencing Travel Behavior via an Open-Source Platform Phase 2* — NICR / U.S. DOT, 2024. doi.org/10.5038/cutr-nicr-y2-3-1.2
- *Influencing Travel Behavior via an Open-Source Platform Phase 1* — NICR / U.S. DOT, 2021. doi.org/10.5038/cutr-nicr-y1-3-1.1

WORKSHOPS, CAMPS & CONFERENCES
- Presenter & Finalist, Intel ISEF 2018 — International Science and Engineering Fair (Pittsburgh, Pennsylvania)
- Interpreter, Intel ISEF 2019 — International Science and Engineering Fair (Phoenix, Arizona)
- Hacks! UPRM Camp (June 2018)
- Web Development Camp (HTML, Node.js, CSS, JavaScript) — Code Trotters (June–July 2017)
- Intro to Elixir Workshop (June 2017)
- Developing UI/UX using Figma Workshop (June 2017)
- International Congress of Small Business — New York (June 2016)