Rainier Joshua Tabelon

rj.lim.tabelon@gmail.com | +1 (813) 812-2049 | linkedin.com/in/rj-tabelon | github.com/RJ-Tabelon | rjtabelon.com

EDUCATION

University of Florida – Herbert Wertheim College of Engineering　GPA: 3.98/4.0

Bachelor of Science in Computer Science, Minor in Electrical Engineering　Aug 2023 – May 2027

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Architecture, Software Engineering, Programming Language Concepts, Full Stack IoT Development, Computer Networks, Internet Storage Systems

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Go, C++, Java, HTML, CSS, SQL, Bash
Frameworks & Libraries: React, Express, Jest, Redux, Tailwind CSS, Socket.IO
Tools: AWS (EC2, S3), Docker, Git, GitHub Actions, Linux, Redis, PostgreSQL, Figma, Postman, Node, REST APIs, JWT, LLMs

EXPERIENCE

Software Engineering Intern　Oct 2025 – Present

AKIO AI　*Gainesville, FL*

- Built a React analytics dashboard aggregating thousands of speech events for therapists to track client progress.
- Optimized rendering via memoization and batched updates, preventing UI stalls under high-frequency data updates.
- Engineered an asynchronous WebSocket audio transcription system in Go for live therapy session note-taking, reducing speech-to-text latency by 3s without data loss.
- Added retry logic and connection health monitoring to handle network interruptions gracefully during live sessions.

Lead Backend Engineer　Sep 2025 – Present

Society of Asian Scientists and Engineers (SASE)　*Gainesville, FL*

- Led backend development on a 9-member Agile team, defining sprint scope and enforcing service ownership.
- Developed an alumni bank update pipeline that ingests all stored LinkedIn profiles via an MCP server, atomically updating 200+ organization-wide alumni records in a single sync.
- Implemented idempotent, conflict-safe upserts to ensure repeatable refreshes without data regression.

Software Engineering Intern　May 2025 – Jun 2025

EDU Africa　*Cape Town, South Africa*

- Built a MERN platform digitizing public-sector housing audits, replacing paper workflows across 30 municipalities.
- Implemented server-side pagination and filtering over a 600K+ record dataset, preventing client overfetching.
- Added Redis caching for read-heavy audit endpoints, improving scalability under concurrent access.
- Optimized frontend for <4GB RAM devices and unstable networks via deferred loading and asset minimization.

PROJECTS

CoreCRM | *AWS EC2, Docker, Jest, Express, Node, PostgreSQL, Neon, Drizzle ORM, JWT, Nginx*　Source Code

- Shipped a production CRM platform with strict relational integrity and role-based access control.
- Deployed on a single AWS EC2 instance with Nginx isolation and persistent volumes for crash-safe restarts.
- Automated a CI/CD pipeline with GitHub Actions to test, build, and deploy Dockerized services to a remote VM over SSH, cutting deployment time by 60% and ensuring reproducible dev-to-prod builds.
- Hardened public APIs against abuse using Arcjet, applying bot detection and sliding-window rate-limit policies.

PicklePortal | *Python, Ultralytics YOLOv8, C++, Arduino, ESP32, Firebase RTDB*　Source Code

- Engineered a distributed IoT system integrating ESP32 cameras, computer vision-based object detection model, and Firebase Realtime Database to track pickleball court occupancy and queues in real time.
- Streamed frames into a persistent YOLOv8 worker, eliminating process startup and cutting detection latency by 50%.
- Designed dual-mode ESP32 camera firmware (JPEG inference vs. MJPEG streaming) to optimize network bandwidth under tight memory and CPU constraints.