Thomas Marconi

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EXPERIENCE

Tactical Air Support   Feb 2024 – Present
Founding Software Engineer / Tech Lead   *Jacksonville, FL*
- **Founding Engineer & Architecture:** Established the core engineering division, owning the technical roadmap and architecture. Built CI/CD pipelines (GitLab) and defined coding standards in a high-ownership startup environment.
- Shipped multiple production full-stack applications using **React, Next.js (TypeScript), and Python**, driving over $850K/year in cost avoidance while ensuring FedRAMP High security compliance.
- Engineered "ReTask," a mission-critical task management platform replacing manual ticketing; implemented a **Real-Time WebSocket architecture** for bi-directional updates, scaling to 100+ daily active users.
- Led technical direction for a team of 3 engineers, conducting code reviews and mentoring on **React patterns** and system design, directly contributing to product stability and quality.
- Designed and deployed secure, scalable microservices (Azure Functions, Docker) to handle sensitive data, ensuring system reliability and monitoring.

Florida State University   Aug 2022 – Dec 2022
Teaching Assistant (Data Structures & Algorithms)   *Tallahassee, FL*
- Mentored 30+ students in C++ programming and algorithmic concepts (Graphs, Trees, Hash Maps), conducting code reviews and teaching office hours for the COP 3330 curriculum.

PRODUCT & TECHNICAL PROJECTS

Project Desert | *Full-Stack Spiritual Wellness Platform* | *Next.js, React, TypeScript, Postgres*   Jan 2025 – Present
https://projectdesert.app
- **Domain Alignment:** Architected a spiritual productivity app enabling users to track ascetical practices and engagement with liturgical content; designed to scale for community accountability groups, mirroring Monk Mindset's core mission.
- **Type-Safe Architecture:** Implemented an end-to-end type-safe system using OpenAPI to auto-generate TypeScript clients, ensuring zero runtime type mismatches between the React frontend and backend.
- **Scale & Performance:** Utilized **React 19 Server Components and Server Actions** for secure, high-performance data fetching, optimizing the "Clean Architecture" separation of concerns.
- Designed a normalized **PostgreSQL** schema and secure auth flow to manage user sessions and sensitive spiritual journal data.

CityScale | *AI Geospatial Analytics* | *React, Next.js, Node.js, TypeScript*   Oct 2025
- Awarded 3rd Place in "AI for Good Hackathon", demonstrating the ability to ship product features quickly in time-constrained environments.
- Developed an interactive React frontend with Leaflet to visualize housing data across 4,500+ census tracts.
- Built high-performance REST APIs to serve over 580,000 data points with low latency.

VOLUNTEER EXPERIENCE

Young Catholic Professionals (YCP)   Dec 2025 – Present
Director of Outreach (Volunteer)   *Jacksonville, FL*
- Spearhead strategic partnerships with Catholic business owners, parishes, and the Diocese to expand the chapter's impact, aligning organizational goals with the broader Church mission.
- Execute outreach initiatives to bring other organizations into closer partnership with YCP, cultivating a network that draws individuals deeper into their faith and professional calling.

A Simple House   Jul 2023 – Dec 2023
Full-time Volunteer / Missionary   *Washington, D.C.*
- Immersed in a full-time service role within a Catholic lay mission community. Lived in simple community, managing logistics for outreach programs and developing a deep alignment with the values of service and mission-driven work.
- Cultivated adaptability, conflict resolution, and leadership skills under pressure while serving underserved populations.

TECHNICAL SKILLS

Frontend: TypeScript, React, Next.js, JavaScript, Tailwind CSS, Radix UI, HTML/CSS
Backend: Node.js, Express.js, Python (FastAPI, Django), REST APIs, WebSockets (Socket.io), PostgreSQL, SQLModel
Architecture: System Design, Clean Architecture, Serverless (Azure Functions), Microservices, Docker, OpenAPI
Tools/DevOps: Git, CI/CD (GitLab), Vercel, Azure, Agile/Scrum, Postman, Linux

EDUCATION

Georgia Institute of Technology   Atlanta, GA
M.S. Computer Science — Specialization: Machine Learning   *Expected Dec 2027*
Florida State University   Tallahassee, FL
B.S. Computer Science — GPA: 3.7   *May 2023*

CERTIFICATIONS

Certified ScrumMaster (CSM)   Jan 2025
ScrumAlliance