Aaron Mathew

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Education

Stevens Institute of Technology Hoboken, NJ
Bachelor of Science in Computer Science *May 2029*
Relevant Coursework: Introduction to Computer Science, Data Structures, Discrete Structures, Computer Architecture, Algorithms

Projects

TradeSignal – AI-Powered Stock Signal Platform | *Next.js, TypeScript, Supabase, SWR* August 2026

- Created and deployed a full-stack market-scanning platform in Next.js and TypeScript that combines live market data, options-flow, AI-driven news sentiment, and configurable ticker filters to surface and rank bullish and bearish trade setups
- Engineered 6 signal-detection algorithms spanning RSI reversals, MACD crossovers, VWAP reclaims, volume spikes, options-flow correlation, and moving-average crossovers, converting multi-indicator confluence into 0–100 confidence scores with calculated entry prices, and 2x ATR stop-losses
- Developed a Llama 3.1-powered conversational assistant for natural-language ticker analysis, active-signal lookup, and account-based position sizing, reducing the manual effort required to interpret technical signals and size trades
- Integrated Yahoo Finance and Finnhub data pipelines with concurrent request handling and per-call timeout controls, enabling reliable multi-ticker scans within serverless execution limits

Budgexia – Personal Budgeting Platform | *Next.js, TypeScript, React, CSS, SQL* January 2026

- Built a full-stack personal finance platform in Next.js, TypeScript, and SQL that centralizes budgeting, transaction tracking, savings goals, and spending analytics within a unified dashboard
- Created a reusable, accessibility-focused component library that standardized UI patterns, eliminated one-off styling, and improved maintainability as new features were added
- Developed an AI-driven Smart Tips engine that compares monthly spending against user-defined budgets and generates targeted recommendations to reduce overspending and identify savings opportunities
- Implemented category-based budgeting, savings-goal tracking, and real-time analytics, giving users an immediate view of spending patterns and progress toward financial goals

PrepAI – SAT Web Application | *Next.js, TypeScript, CSS, Supabase, SQL* December 2025

- Launched a full-stack SAT preparation platform with Next.js and Supabase, implementing secure authentication and protected routing for personalized practice, study planning, and progress tracking
- Developed a configurable practice engine with section- and difficulty-based question filtering, enabling targeted practice with instant feedback across desktop and mobile devices
- Implemented personalized study plans with configurable daily task limits and goal tracking, helping students structure preparation into a consistent daily routine
- Designed reusable UI components and responsive layouts, reducing duplicated frontend code and maintaining a consistent experience across screen sizes

Experience

Assistant to Activities Director Oct. 2023 – June 2025
Mira Vie Nursing Home *Manalapan, NJ*

- Facilitated group activities and provided individualized support to residents with varying mobility and cognitive needs, promoting participation and engagement across daily programs
- Coordinated activity preparation, event setup, and resident participation while collaborating with staff to maintain safe, organized, and efficient program execution
- Built positive relationships with residents and staff through consistent one-on-one support and clear communication, contributing to a welcoming and supportive environment

Technical Skills

Languages: TypeScript, JavaScript, Python, Java, C++, SQL, HTML, CSS
Frameworks/Libraries: Next.js, React, Vue, SWR
Technologies: PostgreSQL, REST APIs, Supabase, Vercel
Tools: Git, GitHub, Linux, VS Code, Figma