Ethan Ng

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EDUCATION

Washington University in St. Louis   St. Louis, MO
Bachelor of Science in Computer Science and Finance   *Aug. 2023 – May. 2027*
- Coursework: Systems Software, Data Structures, Object-Oriented Programming, Programming Languages

TECHNICAL SKILLS

Languages: TypeScript, Node.js, Python, C/C++, Java, Go/Golang, Rust, Swift, SQL
Technologies: React.js/Next.js, React Native, PostgreSQL, MySQL, MongoDB, AWS, Kubernetes, Docker, Git, Linux

PROFESSIONAL EXPERIENCE

Co-Founder & CTO   Dec. 2023 – Present
ConnectAlum, Inc.   *St. Louis, MO*
- Leading development of 4 EdTech products with 9,000+ MAUs using Next.js, PostgreSQL, and DrizzleORM
- $150K+ revenue; recognized in STL Business Journal; won Skandalaris Venture Competition (2/200 teams)
- Utilized pgvector HNSW indexing for embedding-based matching algorithm, cutting search latency 500ms to 60ms
- Architected scalable multi-tenant system with edge computing, subdomain routing, load balancing, and SQL partitioning, supporting 9 schools on shared infrastructure while maintaining data security
- Migrated from Vercel to custom SST + EC2 stack, cutting cold starts by 80% and enabling background workers

Software Engineering Intern   Jun. 2025 – Aug. 2025
Sage Therapy   *San Francisco, CA*
- Deployed a cross-platform React Native Expo app delivering CBT via a fine-tuned conversational AI model
- Applied LoRA/PEFT techniques to improve generation quality, reducing hallucinations and sycophancy by 28%
- Created a Swift-based audio engine for low-latency TTS streaming of partial model outputs
- Implemented semantic VAD using transformer-based embeddings for accurate turn-taking and contextual boundary detection in noisy environments

Lead Developer   Jun. 2024 – May 2025
DevSTAC   *St. Louis, MO*
- Built analytics proof-of-concept for Moelis using TypeScript, SQL, and Tableau; influenced a $6M vendor contract
- Led a team of 4 developers to ship an educational brain-games app with React Native + Construct3
- Established code reviews and engineering practices; improved team velocity by 20% (deliverables timeline)

Founding Software Engineer   Dec. 2023 – May 2024
BloomPal   *St. Louis, MO*
- Launched a Swift stress-tracking app integrating Apple HealthKit for continuous biometric monitoring
- Prototyped an LLM-based stress detector on multi-modal health data to generate coping strategies

Founder & CEO   Sep. 2020 – Dec. 2023
Ethan Ng Technologies, LLC.   *Remote*
- Delivered 50+ client projects (web, mobile, plugins, bots); generated $150K+ revenue
- Recruited and managed a team of 3 developers and a contract manager

PROJECTS

Somnia | *React Native Expo, Apple HealthKit, TypeScript* | GitHub   2nd Place, Hack WashU 2024
- Engineered a sleep-centric mobile app integrating Apple HealthKit and React Native
- Developed AI-powered insights and a social leaderboard, driving user engagement

AI Camera Assistant | *React Native Expo, TensorFlow*   Personal Project
- Built an iOS camera app with React Native and TensorFlow for AI-powered photography assistance
- Integrated real-time JS worklets that analyze live camera frames to provide dynamic suggestions for exposure, framing, and composition directly in the viewfinder

Convolutional Neural Network | *NumPy, Flask, Python* | GitHub   Personal Project
- Coded a CNN from scratch in NumPy with batch norm and residual connections; 99% MNIST and 85% CIFAR-10
- Hosted with Flask API and added Grad-CAM visualizations for explainability