

Nathan Punyataweekul

818-585-2536 | nathanpunyataweekul@gmail.com | linkedin.com/in/nathan-punyataweekul | github.com/gnaten

EDUCATION

University of California Los Angeles

Bachelor of Arts in Computer Science

Expected Graduation: July 2026

Los Angeles, CA

Relevant Coursework: Data Structures and Algorithms, Computer Architecture, Programming in C++, Databases, Discrete Math, Linear Algebra, Efficient Algorithms, Intro to Software Engineering, Computer Security, Compilers

Moorpark College

Associates of Science in Computer Science

Aug. 2021 – Jun. 2023

Moorpark, CA

EXPERIENCE

Software Engineer Intern

Moorpark College

Jun. 2023 – Dec. 2023

Moorpark, CA

- Built a 3D model of the Moorpark College campus for an online map to help students and visitors navigate classes.
- Captured 500+ high-res images of 150 acres using drones, optimizing data collection for campus visualization.
- Achieved sub-20ms latency in drone communication via a WebSocket server built with Node.js and Express.js.
- Reduced 3D modeling processing times by 3x using advanced Reality Capture workflows and scripting in Python.
- Reduced upload times by 30% by streamlining data pipelines with Pandas, AWS Lambda, & PostgreSQL.
- Improved flight monitoring efficiency by 40% by designing an interactive dashboard with D3.js and React.

PROJECTS

PomPomGo (4th at LAHacks) | *HTML, CSS, Node.js, Express.js, Bootstrap, MongoDB, REST APIs, Git, AWS*

- Boosted student productivity by developing a full-stack web app with a Pomodoro timer and to-do list manager.
- Supported 1,000+ task operations by building a dynamic task management system with MongoDB and Express.js.
- Increased user engagement by 30% through a responsive front-end built with HTML, CSS, and Bootstrap.
- Handled time tracking and task data efficiently by building a RESTful API with Node.js and Express.js.
- Provided insights on study patterns using integrated analytics, helping users improve productivity by 20%.
- Achieved 99.9% uptime for 200+ active users by deploying on AWS cloud hosting with automated scaling.

AlgoArchive | *SwiftUI, iOS, Xcode, Git, Swift, Core Data, XCTest*

- Built an iOS app that serves as an algorithm repo, featuring 20+ algorithms taught in class for learning & review.
- Designed an UI displaying a searchable and filterable list of algs, each linking to a detailed information page.
- Created alg pages containing descriptions, videos, data visualizations, and code examples in multiple languages.
- Optimized app performance by 25% through dynamic list rendering and lightweight visualizer components.
- Increased user engagement by 40% with animated step-by-step algorithm simulations for better understanding.
- Continuously expanded the app by adding 10+ new algs and enhancing visualizer interactivity based on users.

BruinOutlet | *JavaScript, Node.js, CSS/SCSS, MongoDB, Git, JSON Web Tokens, npm, AWS*

- A UCLA-branded storefront web app supporting real-time browsing of 15+ products for the UCLA community.
- Improved load speed by 25% by building a responsive UI with JavaScript, & CSS/SCSS, optimized for all devices.
- Secured 1,000+ user sessions by implementing JSON Web Token authentication, reducing login issues by 20%.
- Reduced deployment time by 30% across 3+ environments using npm scripts for seamless database/server configs.

TECHNICAL SKILLS

Languages: C++, Python, JavaScript, TypeScript, SwiftUI, Swift, SQL, HTML, CSS, Go, C, LaTeX

Tools & Technologies: Git, AWS, Docker, React, Node.js, Express.js, MongoDB, PyTorch, Tensorflow, PostgreSQL, Flask, Bootstrap, Reality Capture, D3.js, Pandas, ElasticSearch, Core Data, Xcode, XCTest, npm, Visual Studio, IntelliJ, Eclipse, Obsidian

Concepts: Full Stack, Backend, Frontend, REST API, Microservices, Distributed Systems, Real-time Communication, Task Management Systems, Interactive Visualizations, Data Analytics, System Design, Software Engineering, Databases, Data Processing, Data Science, Embedded Systems, Parallel Programming, Operating Systems