# Nicholas Gutierrez

# EDUCATION

## Farmingdale State College

Farmingdale, NY

B.S. in Computer Science, Magna Cum Laude, GPA: 3.83

May 2024

Coursework: Data Structures and Algorithms, Object-Oriented Programming, Database Management, AI and Machine Learning, Operating Systems, Android Mobile Development

# TECHNICAL SKILLS

Languages: TypeScript, Java, C#, Python, PHP, Kotlin, SQL Technologies: React, Node.js, .NET, Angular, Vue, Next.js

Developer Tools: Git, Unix/Linux, Docker, MongoDB, Firebase, Postman, Agile development

Testing: JUnit, Swagger, Jest

#### EXPERIENCE

## Software Engineer Intern

Feb 2024 – Present

BeeEnrolled Remote

- Contributed to full-stack development of an E-learning platform utilizing Vue, Laravel, and MySQL, adhering to the Model-View-Controller (MVC) design pattern best practices.
- Improved social media outreach by developing dynamically generated Open Graph meta tags, providing a visually appealing and contextually accurate view of each URL, leading to a 73% increase in site traffic.
- Achieved a 20% decrease in average page load time for the instructor dashboard by developing an API that enables conditional rendering of Vue components pertaining to onboarding completion.
- Spearheaded development of a new feature, utilizing Laravel's ORM, to efficiently query and serve dynamic class schedules based on user-specified time ranges.

#### Co-Technical Lead

Sep 2023 - May 2024

Google Student Developer Club

Farmingdale State College

- Collaborated with a team of 4 other officers to create 5 technical workshops with content ranging from AI/ML, working with cloud services, and web development, which were attended by 20+ computer science students.
- Assisted the GDSC lead in curating materials for each workshop and inviting expert speakers to host tech talks.

#### **PROJECTS**

# AI PDF Analyzer | TypeScript, Next.js, PostgreSQL, AWS, Pinecone, Drizzle

Apr 2024 - Present

- Actively developing a webapp focused on users uploading PDF documents to an S3 bucket which are scanned into vector embeddings and interpreted by an OpenAI model for users to chat with about the selected PDF document.
- Applied the Retrieval-Augmented Generation (RAG) technique in machine learning to convert PDF documents into vector embeddings and analyze them using vector similarity for AI-driven interactions.
- Enforced least privilege access principles for an S3 bucket by configuring bucket policies and IAM roles to only grant controlled access for authenticated application users.
- Implemented a type safe Postgres database schema by using TypeScript with Drizze ORM to create all necessary tables.

#### Elevate | Node.js, React, Express, GCP, Railway, Tailwind

Mar 2024 - May 2024

- Collaborated with a cross-functional team of 3 other students to create a fitness and dieting platform with a comprehensive set of features including workouts tracking, workout tutorials, and nutrition fact breakdowns.
- Leveraged Google Maps and Places Autocomplete to create a gym locator which shows all fitness centers within 15km of the search location.
- Led development of the detailed workouts feature where users can see detailed descriptions of over 600 workouts and a corresponding YouTube tutorial of how to perform each exercise.

## QuickPrompts | Next.js, Google Cloud Platform, MongoDB, Tailwind

Oct 2023

- Developed a full-stack web application for sharing AI prompts for use in LLMs such as ChatGPT.
- Engineered a CRUD API to interact with the MongoDB database, storing all user prompts.
- Implemented a search feature that enables users to search for prompts by hashtag or by content match.
- Leveraged Tailwind responsive design breakpoints to ensure the site layout is consistent across all device sizes.