

Dung (Trique) Nguyen

dung.n.nguyen@sjsu.edu | linkedin.com/in/trique-nguyen | github.com/triquenguyen | triquenguyen.tech

EDUCATION

San Jose State University

Bachelor of Science in Software Engineering

San Jose, CA

Expected May 2025

Coursework: Enterprise Software Platforms, Computer Networks, Blockchain & Cryptocurrencies, Software Testing & Quality Assurance, Information Security, Operating Systems, Data Structures & Object Oriented Design

Bellevue College

Associate in Sciences in Computer Science

Bellevue, WA

Jan 2021 - Jun 2022

TECHNICAL SKILLS

Languages: Python, Bash, Java, JavaScript, TypeScript, C/C++, SQL, HTML, CSS

Frameworks: React.js, Redux, Tailwind CSS, Next.js, Node.js, Express.js, Spring Boot, FastAPI, Flask

Databases & Cloud: PostgreSQL, MySQL, MongoDB, Prisma ORM, Docker, Google Cloud Platform

Others: Android, Linux, Agile/Scrum, DevOps, REST API, GraphQL, gRPC, Git, Postman, Chrome API

EXPERIENCE

Research Assistant

Aug 2023 – Present

SJSU CS Systems Group - Charles W. Davidson College of Engineering

San Jose, CA

- Collaborate with Dr. Ben Reed to develop a Disconnected Data Distribution network for Android phones applying Delay Tolerant Network, enabling data transfer between disconnected regions via Wi-Fi Direct and Spring server
- Construct a performance testing solution for gRPC server utilizing Python and Protobuf, conducting strategic refactoring techniques to investigate and resolve 7+ connectivity issues between MySQL and server
- Migrate SQL queries to Spring Data JPA for 10+ schemas, mitigating 90% of set up and data query complexity

Technical Lead Officer

Aug 2023 – Present

Association for Computing Machinery at SJSU

San Jose, CA

- Direct 15 students to develop club management tools and facilitate technical workshops for 100+ members
- Spearhead and architect an end-to-end system with Next.js, MongoDB, AWS S3, and Google Cloud Platform
- Streamline the authentication and authorization system with NextAuth.js and Google OAuth 2.0

Founding Software Engineer Intern

Oct 2022 – Aug 2023

Forward AI - SpartUp Incubator Member

Hybrid

- Engaged with 2 founders on the core research and development of an AI-powered job seeking assistant platform
- Led the user interface design and operation of the alpha testing product using React and Chrome API
- Implemented a Flask server for processing 500+ file uploads and automatic matching of 200+ jobs per user daily
- Delivered an intuitive authentication process with Auth0, enhancing app security and reducing code load by 80%

PROJECTS

Rhythm Moodify | *React.js, FastAPI, Spotify API, OpenAI, Milvus, Hume AI*

DevPost

- Designed and developed a song recommendation system using vector database and human expression detection
- Analyzed user expressions and extract 50+ emotions using Hume AI and personalize playlist with Spotify API
- Generated playlist from 300+ songs in FastAPI with self-designed matching system using Milvus and OpenAI

Bay Area Banking Service | *Next.js, TypeScript, Redux, PostgreSQL, Prisma ORM, Supabase*

GitHub

- Managed a team of 6 students to build a banking software that manages users' finances in Next.js and TypeScript
- Modelled optimized PostgreSQL schemas for data integrity and managed cloud migration using Supabase
- Performed data query processes with Prisma ORM and built REST APIs to handle 10+ user functionalities

LeetCode Discord Bot | *Python, Discord API, GraphQL*

GitHub

- Programmed a Discord Bot that challenges 1900+ SJSU students to solve daily random LeetCode problems
- Leveraged Discord API to develop 7+ key functionalities in Python that execute and respond to user commands
- Reconstructed algorithms to resolve soft collision and asynchronous data handling for 2000+ problems

ACTIVITIES & AWARDS

Best Data Science Hack | *Major League Hacking - Hackrithmitic 2*

Demo/DevPost

Top 10 Award Hack | *Northern California Hackathons - Planet Unity Spring 2023*

Demo/DevPost