

## Frontend & UI Development

- Develop dynamic, responsive interfaces using modern HTML/CSS and component-based frameworks to ensure smooth state transitions.

## State Management & Communication

- Streamline data flow with robust, asynchronous state management and secure, type-safe remote procedure calls between client and server.

## Backend & API Architecture

- Design scalable, event-driven server systems with modular RESTful/RPC-based APIs focused on high-performance request handling.

## Data Management & Persistence

- Build resilient data layers by integrating relational (SQL/ORM) and non-relational databases, emphasizing security and scalability.

## Styling, Animation & Workflow Optimization

- Apply utility-first styling and fluid animations for consistent, engaging visuals, while leveraging agile (kanban-style) methodologies and modern project-tracking tools for efficient system design and delivery.

# Ryan Nguyen

<https://github.com/ryananh Tuan-nguyen>

[ryan.nguyen0720@gmail.com](mailto:ryan.nguyen0720@gmail.com)

<https://www.linkedin.com/in/ryan-nguyen-902196293/>

0279789078

<https://ryannguyen.it.com/>

## Summary

I'm a full-stack software engineer who is in search for the next challenge. I bring a strong technical background and unwavering confidence to every collaborative project. Based in New Zealand, I'm ready to make significant impacts in the tech world.

## Experience

### Nucanon – Software engineer

Auckland, New Zealand / Australia (remote)

02/2024 – Current

As one of the founding engineers in the team, I've been involved since the early prototype stage, contributing to the product's evolution from concept to production. My role spans the full development life cycle, including coding, design, testing, collaboration, documentation, problem-solving, version control, CI/CD implementation, security compliance, and adapting to industry trends.

#### Key Contributions:

##### AI World-Builder Assistant

- Built an AI co-pilot that lets users **query details** about their fictional worlds, **generate custom avatars/images** (e.g., landscapes, characters), and **create voiceovers** for entities, streamlining creative storytelling.

##### Interactive Story Flow Designer

- Designed a **node-based interface** (using React Flow) to visually map storylines, replacing clunky text documents. Users can:
  - Track scenes, characters, and plot connections visually.
  - Attach multimedia (background music, images) to nodes.
  - Launch **Playmode** to transform static nodes into an interactive "choose-your-own-adventure" experience, where choices dynamically guide the narrative.

##### Team Collaboration Workspaces

- Created a workspace system where teams securely co-build worlds:
  - Users join multiple workspaces, each hosting independent worlds/stories.
  - Granular permissions ensure only members can edit/view content (e.g., entities, story flows).

##### Performance & Scalability

- Reduced load times by 40% via smart data caching (TanStack Query) and optimized PostgreSQL queries.
- Ensured real-time collaboration (text, cursors, presence) using Liveblocks' WebSocket infrastructure.

##### User-Driven Iteration

- Monitored engagement with PostHog to refine features like Playmode's branching logic and AI avatar quality.

##### Secure Team Access & Permissions

- Implemented seamless **login/signup flows** and role-based access using **Clerk Auth** (secure user management platform), ensuring only authorized users can

edit or view sensitive content.

- Enabled users to:
  - Join multiple workspaces (e.g., teams, projects).
  - Collaborate safely with granular controls over worlds, entities, and story flows.

#### **Robust Automated Testing & Quality Assurance**

- Established a comprehensive testing framework by designing and writing extensive unit tests and integration tests. These tests were integrated into our CI/CD pipeline.
- Enabling early bug detection, maintaining code quality through rapid feedback loops.
- Ensuring that core features consistently perform as expected even as the product evolves.

For more information, please check out: <https://nucanon.com>

### **Freelancer software engineer**

*New Market, Auckland*

*09/2023 – 06/2024*

One of the contributors to the content of a tech YouTube channels that has about **25k+** subscribers on YouTube and **50-100k+** view videos, and also one of the moderators in the active discord community, providing free educational content for people wanting to get into the tech world.

With a small team (under 10, with only 3-4 developers currently), our latest content hit **100k** views under 5 days, got 15+ offers from companies in the USA but the source code are free and you can build your own from it.

A few other completed projects I have built & collaborate after graduating from Dev Academy, having **10-25** active users could be found in my portfolio.

### **Dev Academy Aotearoa – Student/Junior Full Stack Web Developer**

*New Market, Auckland*

*06/2023 - 09/2023*

During this *15-week* intensive bootcamp, I devoted approximately **60+** hours per week to lectures, assignments, challenges, and side projects. This includes:

- Pair programming & problem solving most of the time.
- Small group projects and multi-day projects:
  - Small 2-day projects within groups of 3.
  - Using agile methodology and following its principles in all group projects as an approach to project management.
  - Having experienced real-industry roles such as git lead, front-end, back-end, products owner.

### **References**

References available upon request.