

Pattarapol Tantechasa

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Summary

Final-year Computer Science student at **Swinburne University** graduating **July 2026**, with **7 months of hands-on production backend experience** at **Focus Bear**. Specialized in backend engineering with **NestJS, TypeScript, and PostgreSQL**, with growing expertise in **.NET, AWS cloud infrastructure, and DevOps practices**. Experienced working in **Agile** teams shipping real features, diagnosing production issues, and building systems with security and resilience in mind. Currently deepening skills in system design, cloud architecture, and data-driven applications using **Python** and **AI tooling**.

Technical Skills

Languages: TypeScript, JavaScript, C#, Python, C++, HTML5, CSS, PHP.

Backend & Frameworks: NestJS, ExpressJS, NodeJS, .NET, FastAPI

Frontend: ReactJS, VueJS, TailwindCSS, Vuetify, Bootstrap, DaisyUI

AWS Cloud: EC2, S3, RDS, VPC, IAM, CloudWatch.

Databases: PostgreSQL, MySQL, MongoDB.

Tools & DevOps: Git & GitHub, Docker, Postman, Bruno, Swagger, GitHub Actions.

AI Dev Tools: GitHub Copilot, Claude Code.

Practices: Agile/Scrum, Kanban, Conventional Commits, REST API design, CI/CD.

Work Experience

Focus Bear | Melbourne, Australia

7 months, Aug 2025 - Mar 2026

Back End Developer Intern | NestJS, TypeScript, Docker, PostgreSQL, Swagger & AWS CloudWatch

- **Diagnosed and resolved production API performance bottleneck** (7,800ms P90 latency, intermittent failures) by implementing **CloudWatch** metrics interceptor with performance budgets, analyzing production logs via **CloudWatch Insights**, and identifying root causes: blocking external API calls and duplicate database queries.
- **Optimized critical API endpoint** by migrating real-time notifications to **BullMQ** async background jobs (eliminating user-facing failures), removing duplicate database queries, and adding transaction-level performance instrumentation for ongoing monitoring.
- **Architected and implemented a multi-platform in-app announcement system** using **NestJS** and **TypeScript**, reducing reliance on email updates and enabling targeted communication based on platform (iOS, Android, Mac, Windows) and app version.
- **Implemented automated versioning endpoints** for CI/CD pipelines, enabling the system to dynamically distinguish between production, beta, and deprecated app versions.
- **Enhanced OCR data accuracy** for screen-time analysis by optimizing **LLM prompts** (OpenAI & Gemini) through **Promptfoo**, resolving critical data gaps in time-tracking reports.
- Worked within **Agile/Scrum** methodology across **2-week sprints** using **GitHub Projects (Kanban)**, participating in daily stand-ups and fortnightly retrospectives to plan and review sprint deliverables.
- Followed Conventional Commits standards, used **Docker** for local development environments and leveraged **GitHub Copilot** and **Claude Code** to accelerate development velocity

Education

Swinburne University of Technology | Melbourne, Australia

Expected Graduation: July 2026

Bachelor of Computer Science | Major Software Development

- **Relevant Coursework:** Data Structure, Algorithms, Object Oriented Programming, Concurrent Programming, Software Architecture, Cloud Computing Architecture, Computer System, Network Switching, Network Security and Resilience.
- **Current Semester (2026) :**
 - Building data-driven applications using Python, pandas, and machine learning pipelines, working with real datasets, pre-processing, model integration, and result analysis
 - Capstone Project (Client-Facing, Team of 6), lead backend developer building a client-commissioned application using ExpressJS, MongoDB, and Swagger. Led backend architecture decisions and API design while liaising directly with an external client to translate requirements into technical solutions.

Holmesglen | Melbourne, Australia

April 2023

Certificate IV in Web Development

Language

- **English** (Fluent)
- **Thai** (Native)

Projects

Hotel Booking Platform (In Development) | [Source](#)

Current

GitHub, C#, .NET, AWS, Docker, PostgreSQL, System Design, DevOps

- Independently designing and building a hotel booking platform as a self-directed project to deepen expertise in **.NET** backend development, **AWS cloud deployment**, and **DevOps** practices.
- Applying system design principles including service separation, database schema design, and CI/CD pipeline setup.
- Maintained clean Git history using Conventional Commits with full project documentation on GitHub.

GamerQuest | [Source](#)

2025

Full Stack Website | VueJs, Vuetify, Bootstrap, PHP & MySQL

- Developed and deployed a **full-stack social web application** where users can discover new games, write reviews, and manage their personal game library.
- Utilized **VueJS**, **Vuetify** (for UI components and input validation), and **Bootstrap** for the user interface, alongside **PHP** for the backend and **MySQL** for data storage, demonstrating proficiency in modern web development frameworks and database management.

AWS Cloud Architecture | [Source](#)

2024

AWS VPC, EC2, RDS, S3, Lambda, ELB, Auto Scaling, IAM, NACLs

- Built two progressively complex **AWS infrastructures** from scratch, starting with a secure **multi-subnet VPC** and scaling up to a fully highly available architecture across multiple availability zones.
- Implemented **Auto Scaling Group** with Application **Load Balancer**, Lambda-triggered image processing, least-privilege IAM roles, and layered security using **Security Groups** and **Network ACLs**

Lunatia Project | [Source](#)

2024

Texted Based RPG Game | C#, Object Oriented Programming, Unit Test & Design Pattern

- Developed an advanced text-based RPG game in **C#**, applying **Object-Oriented Programming (OOP)** principles and **design patterns** to create a scalable, modular and maintainable application structure.
- Extended game functionality by integrating advanced **C#** concepts like **Language-Integrated Query (LINQ)** and robust handling of external data files (JSON/text).
- Ensured high code quality and reliability through the implementation of comprehensive **unit testing** using **NUnit**.

PropertyLens | Back End Developer | [Source](#)

2024

Full Stack Website | ReactJS, FastAPI, ChartJS, Material-UI, Collaborative Development & AI Model Integration

- Played a key role as a **Back End Developer** in building an AI model-integrated full-stack web application designed to predict house prices and categories.
- Designed and implemented resilient **RESTful API** endpoints using **FastAPI**, serving as the backbone for data exchange between the frontend and the AI model.
- Successfully packaged and seamlessly integrated a Python-based AI model into the web application, enabling real-time predictions.
- Contributed to the frontend with **ReactJS** and **Material UI**, specifically developing interactive data visualizations using **ChartJS** and ensuring accurate processing of user inputs for AI predictions.
- Proactively introduced and managed **Git/GitHub** for **version control**, establishing efficient feature branching strategies and overseeing code integration, including thorough pull request reviews, to maintain code quality and foster team collaboration.