

Daniel Mattioli

Melbourne, Victoria, Australia

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SUMMARY

Final-year Software Engineering (Honours) student at Deakin University with hands-on experience delivering real-world software solutions through industry and capstone projects. Proven ability to design, build, and debug full-stack and IoT systems, with a strong focus on problem-solving, system integration, and practical implementation.

EDUCATION

Deakin University - Bachelor of Software Engineering (Honours) **Mar 2023 - Present** (Expected completion Nov 2026)

- Minor - (Game Design) **2015 - 2022** (graduated)

Xavier College (Kew) - VCE

- Mathematical Methods, Physics, Software Development, English, Business Management, Physical Education.

TECHNICAL SKILLS

Tools & Platforms

Git/GitHub, Docker, Postman, Unity, Unreal Engine 5, MQTT, Arduino, Node-RED, CI/CD

Languages

C++, C#, JavaScript/TypeScript, Python, SQL

Frameworks & Tech:

React, ASP.NET Core, Node.js

PROJECTS

- **AI Tutor Chatbot (Bugbox) - Front-end & API integration:** Developed a lesson-aware chatbot interface with file upload and text extraction (PDFs, Tesseract), improving response relevance and usability through testing with 10+ students at Deakin Open Day. Coordinated using GitHub and Kanban.
- **IoT Systems:** Designed and implemented real-time IoT applications using Node.js MQTT pub/sub and Node-RED dashboards, integrating Arduino Nano 33 IoT (timers/interrupts), LED control modes, automated load-cell pet feeder, RFID door locking system, DHT11 telemetry, and cloud/device data logging. Enabled reliable device communication and real-time monitoring across multiple sensor nodes.
- **ASP.NET Core Web API (Robot Simulator):** Developed N-Tier API architecture with custom BasicAuth handler, authorization policies, and unit tests. Implemented endpoints for map and command handling, tested using Postman and documented via Swagger UI, ensuring secure and reliable API interactions.
- **Java + JUnit/Selenium Testing:** Implemented unit and end-to-end tests for a login system, improving reliability of authentication through automated CI-integrated testing.
- **C++/Parallel Programming:** Implemented and benchmarked parallel algorithms (Threads, OpenMP, MPI), achieving faster execution compared to sequential implementations.

WORK & COMMUNITY EXPERIENCE

Software Engineering Intern - Havi Technology (Melbourne VIC) **Nov 2025 - Feb 2026 (450 hours)**

- Integrated Odoo ERP with 3CX VoIP, enabling automated CRM call journaling and real-time contact lookup.
- Developed and tested REST API workflows using Postman, improving data accuracy by debugging XML/JSON mappings.
- Contributed to enterprise system integration, including logging, authentication, and Agile development processes.

Sales Agent - Australian Private Networks (APN / Activ8me) **Mar 2023 - Present**

- Managed inbound sales enquiries, guiding customers to suitable internet products and completing service connections, developing strong communication and problem-solving skills.

Warehouse & Job Site Painter - Mattioli Bros Pty. Ltd. **2020 - 2022**

- Supported warehouse operations and on-site work, demonstrating reliability, teamwork, and time management in fast-paced environments.

Volunteer & Community Service - Balwyn Evergreen Centre **2019 - 2020**

- Helped run senior activities, tutored primary students, and supported school/community events.

REFERENCES

- Trent Fischer - Sales Manager - APN / Activ8me - trent.fischer@apn.net.au
- Ryan Vu - Technical Director - Havi Technology - ryan@havi.com.au