TAI TRAN

Brisbane, Australia
0479 049 287 | Email: taitranz@ymail.com LinkedIn: linkedin.com/in/taitranz Portfolio: taitranz.com
GitHub: github.com/Taitranz Blog: blog.taitranz.com

PROFILE

Software engineer focused on outcomes: turning ambiguous requirements into shipped, maintainable software, owning delivery end-to-end, and balancing timelines, engineering capacity, and technical trade-offs. Primarily Python, but language-agnostic and happy to use the right tool for the job.

CORE COMPETENCIES

- Product Delivery: End-to-end ownership of software products, from initial concept and requirement gathering to deployment and maintenance.
- Process Automation: Specialised in identifying administrative bottlenecks and implementing automated workflows that reduce overhead by up to 90%.
- Decision Support Systems: Experience building AI-driven tools that normalise complex data into actionable insights for human decision-makers.
- Systems Thinking: Deep understanding of how modular design and structured data improve long-term reliability and team scalability.
- Strategic Trade-offs: Proven ability to balance rapid feature delivery with technical stability and project timelines.
- Communication & Leadership: Skilled at translating complex technical constraints into clear business options for stakeholders.

PROFESSIONAL EXPERIENCE

Lead Software Engineer (Contract) | Lewy Security (Agentic Security Hardening)

Nov 2025 - Present | Sydney, New South Wales, Australia (Remote)

Major Duties:

- **Product Leadership:** Led the end-to-end development of a large-scale security automation platform, managing the full product lifecycle from initial concept to deployment.
- **Automated Risk Analysis:** Developed a high-speed data engine to aggregate and normalise results from multiple security tools, processing up to 500+ security alerts per second.
- **Smart Prioritisation:** Implemented data-driven modelling to identify the top 10% of high-risk areas, reducing 'time-to-signal' for critical issues by 60%.
- **AI-Assisted Operations:** Integrated intelligent triage systems to group thousands of security alerts, reducing false-positive 'noise' by 75% through automated verification.
- **Guided Workflow Design:** Designed a streamlined remediation process for security findings, achieving a 65% first-pass acceptance rate for suggested fixes.
- **System Infrastructure:** Built high-performance internal tools and audit systems handling over 50,000 events, ensuring complete traceability and compliance.

Successes:

- **Operational Efficiency:** Reduced review time from hours to minutes by grouping findings, enabling teams to process 50+ issues per batch.
- **Cost Optimisation:** Reduced operational costs by 40% through intelligent data processing while maintaining high accuracy in remediation.
- **Rapid Scalability:** Expanded the platform's capabilities into three new domains (Security configuration, Infrastructure-as-Code) in under two weeks without core disruption.
- **Reliability & Quality:** Maintained exceptionally high quality standards (90%+ automated test coverage), ensuring zero major regressions during rapid growth phases.

Lead Software Engineer | Hooper Music Studio (Contract)

Nov 2025 - Jan 2026 | Brisbane, Queensland, Australia (On-site)

Major Duties:

- **Comprehensive Product Development:** Led the design and delivery of an all-in-one business management platform, coordinating complex workflows across student records, scheduling, and finance.
- **Constraint-Based Scheduling:** Engineered a sophisticated booking engine that evaluates 150+ weekly time slots against teacher availability, holiday calendars, and business rules.
- **Automated Financial Operations:** Developed a custom financial core that automated bank reconciliation for thousands of transactions, providing the business with real-time profitability reporting.
- **Commerce Integration:** Streamlined the customer checkout experience by integrating digital payments and automating invoice generation, eliminating manual administrative work.
- **Security & Quality Assurance:** Established rigorous operational standards for data privacy and system reliability, ensuring stable performance for business-critical operations.

Successes:

- **Digital Transformation:** Replaced manual administrative workflows with an automated ecosystem, reducing overhead for payroll, invoicing, and scheduling by 90%.
- **Enhanced User Experience:** Delivered a responsive, modular interface that improved the experience for teachers, parents, and students.
- **Rapid Feature Delivery:** Successfully delivered complex business features in rapid 2-week cycles while maintaining 100% system stability.

Lead Software Engineer (Contract) | Valgo Trading

Jun 2025 - Dec 2025 | Brisbane, Queensland, Australia (Hybrid)

Major Duties:

- **Systems Design:** Led the architecture of a large-scale data analysis and decision platform, ensuring a clear separation between analytical models and core business logic.
- **Intelligent Decision Support:** Engineered an AI decision layer that uses structured data models to reduce errors and ground reasoning in verified market states.
- **High-Performance Data Visualisation:** Built a custom visual engine to render 10,000+ interactive data points in real-time at 160 frames per second, enabling instant reaction to market changes.
- **Operational Efficiency:** Developed high-throughput data management systems to handle massive volumes of incoming information without impacting user experience or system stability.
- **Data Reliability:** Integrated real-time data streams into a unified processing engine used for both historical simulation and live execution, ensuring consistency and reliability.

Successes:

- **Performance Leadership:** Outperformed industry-standard visualization tools by 5x, delivering ultra-smooth performance for data-heavy environments.
- **Reliable Autonomy:** Delivered a stable human-in-the-loop system where every automated decision is transparently explained and visually supported.
- **System Stability:** Eliminated data loss and system instability during high-volatility events by implementing robust state management and safeguards.

KEY PROJECTS

Date Range Picker - Modular Interface Component

- Developed a reusable interface component for selecting dates and ranges, designed for seamless integration into larger business applications.
- Delivered as a professionally packaged library with clear versioning, comprehensive documentation, and automated quality assurance testing.

EDUCATION

Bachelor of Information Technology - Major: Computer Science; Second Major: Computational and Simulation Science

Queensland University of Technology (QUT), Brisbane

WRITING & COMMUNICATION

- “Valgo: A Modern Decision Support System” - A detailed overview of how a complex data platform is built, from information intake to automated execution.
- “Improving AI Performance with Structured Context” - An article explaining how clear documentation and structured data help AI tools assist people more effectively.
- “Valgo Strategic Progress Report” - A report on the development milestones, design choices, and lessons learned while building a complex data application.
- Project Case Studies - Detailed reviews of past projects, analysing performance, risk management, and opportunities for future improvement.

REFERENCES

References available upon request; reference page will be provided.