

Jack Sydenham

0422-880-232 | jack.sydenham@live.com.au | jacksydenham.dev | [LinkedIn](#) | [GitHub](#)

EDUCATION

RMIT University

Bachelor of Software Engineering

- GPA: 3.4/4.0

Melbourne, VIC

Expected Dec. 2025

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Node.js, Python, SQL

Frameworks & Libraries: React, Next.js, tRPC, React Three Fiber (r3f), Prisma, Zod

Tools & Platforms: Azure, AWS, Docker, Git, Redis, PostgreSQL, OpenAI API, OAuth 2.0, Power Platform, Jira

EXPERIENCE

Full Stack Engineer

July 2024 – July 2025

Astral

Melbourne, VIC

- Built core document lifecycle features, including versioning and access control, to meet the enterprise security standards required for clients like IXOM and QLD Transport.
- Designed and built a complete audit logging system, modeling before/after states for 28 admin actions to provide full platform traceability in a React portal.
- Built a secure REST API for entity supersession, enforcing data integrity and protecting critical endpoints with JWT authentication.
- Shipped 12 administrative features, comprising over 80% of the React admin portal's configuration UI.

PROJECTS

Agent Bond (AI-Powered Jira Automation) | *React, Node.js, TypeScript, Azure Speech, OpenAI API, Jira API*

- Engineered an AI agent that automates developer workflow by consolidating a 10+ click Jira process into a single, real-time voice command within Discord.
- Built a low-latency audio pipeline in Node.js to decode Discord's Opus streams to PCM for real-time transcription via Azure Speech Service.
- Designed a secure, user-approved workflow using GPT-4 to parse voice into structured Jira commands, confirmed via a React UI and executed using a secure OAuth 2.0 flow.

Personal Portfolio & 3D Skill Matrix | *React, TypeScript, React Three Fiber (r3f), Zustand, Blender*

- Built an interactive 3D portfolio, boosting rendering from ~40 to 95+ FPS while handling 20x more 3D objects via Three.js instancing and React memoization.
- Synchronized state across 25+ 3D components and React UI via centralized Zustand store.

AI-Powered Automated Content Platform | *n8n, GPT-4, React, PostgreSQL, Clerk*

- Led end-to-end integration of n8n content lifecycle, achieving a sub 45 second turnaround from user input to SEO-friendly blog/image generation.
- Designed a scalable, multi-tenant backend to support 1000+ users, achieving high-concurrency via parallel n8n workflows and security with Clerk authentication.
- Developed the prompt logic for GPT-4, transforming raw scraped data and user keywords into structured blogs.

OPEN SOURCE CONTRIBUTIONS

Poimandres (pmndrs) Ecosystem

- Collaborated with project maintainers to enhance mobile usability, improving cursor-to-canvas tracking in the React Native renderer for React Three Fiber (29k+ stars).
- Contributed 5+ documentation updates to clarify API behavior and improve library usability.

CERTIFICATIONS

- Microsoft Certified: Azure Fundamentals (AZ-900)**

Microsoft, 2024