Jake Spencer W.

0435 739 578 | jake@svnty.is-a.dev

Education

UTS – BEng in Biomedical and Mechatronic Engineering (Honours) — Expected May 2028
UTS – BSc in Medical Science — Expected Nov 2026
TAFE – Cert IV in Computer Programming — 2020
TAFE – Cert IV in Cyber Security — 2019

Experience

Crew Member, Pattysmiths – Kings Cross, Sydney — Sep 2024 – Present

- Voted most liked team member by manager and peers

Software Developer, ClockOn – Gosford, Central Coast — Jul 2019 – Feb 2020

- Improved accessibility for customers by creating a web-based user interface using C# ASP.NET & jQuery
- Trained team members on new progressive web frameworks and compilation tools to improve development cycles

Fiber Splicer, Shockman – Regional NSW — 2015

- Supported infrastructure and network operations, troubleshooting and maintaining systems across customer-facing environments

Placement, Academy of Interactive Entertainment – Ultimo, Sydney — 2014

- Selected by the school deputy principal to attend a competitive work experience course on video game development
- Studied 3D animation using Blender and video game development in Unity using C#

Projects

VS-Code Arduino IntelliSense — marketplace.visualstudio.com/publishers/svnty

- Improved developer experience for over 150 developers by automating the inclusion of compile-time C++ type definitions into Arduino workspaces during code editing and minimizing latency by caching source files

Alternipedia — alternipedia.org/

- Built a multi-perspective encyclopedia platform that enables users to compare ideological interpretations of the same topic, improving online content transparency, engagement and training sets for artificial intelligence

Medicamina — medicamina.us/dash

- Designed and built a precision medicine platform providing clinicians and families with patient-specific insights, leveraging Microsoft Azure database driven analytics and dynamic data visualization
- Developed a deep learning blood cell classifier achieving 99.5% validation accuracy, integrating image preprocessing and MLP&CNN-based classification

Low Earth Orbit object tracker — github.com/svnty/ISS-arduino-tracker

- Designed and implemented a real-time ISS tracking system using Arduino, GPS, Wi-Fi, and public APIs, integrating orbital data retrieval and 3D-printed hardware to accurately track the International Space Station from any location

Coreable — github.com/coreable

- Successfully launched an incubator idea – built and deployed a production-ready web application stack (SQL, Google Cloud Platform, TypeScript, NodeJS, GraphQL, ReactJS, Bootstrap)

Skills

Information Technology: SQL, Rust, Python (TensorFlow, Keras), Linux, UML, Agile, Next.js,
Engineering: Autodesk Fusion, 3D printing, DC circuit analysis, microcontrollers
Biology: Cell culturing, microscopy, hemocytometry, titrations, centrifugation, gel electrophoresis, spectrophotometry, gene recombination, flow cytometry, karyotyping

Special Considerations

For 26 weeks of the year (during university semester) I can work part time, the other 26 weeks I can work full time