Hey, I'm Jake.

Email me: jake@svnty.is-a.dev

My 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

My 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#

Some Projects

VS-Code Arduino IntelliSense
- 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
- 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
- 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
- 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
- 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

University of Technology Sydney

Online Student Record

Jake Spencer Walklate
Student Number: 14030112

C10184 Bachelor of Medical Science
(Withdrawn)

Completed Subjects				Result	Mark	Credit Enrolled	Points Gained
35010	Foundation Mathematics	2020	SPR	PASS	63	6	6
48610	Introduction to Mechanical and Mechatronic Engineering	2020	SPR	CREDIT	72	6	6
65111	Chemistry 1	2020	680	PASS	59	6	6
91161	Cell Biology and Genetics	2020	SUM	CREDIT	65	6	6
33130	Mathematical Modelling 1	2020	SUM	CREDIT	68	6	6
65212	Chemistry 2	2021	605	CREDIT	65	6	6
91314	General Microbiology	2021	AUT	PASS	63	6	6
33230	Mathematical Modelling 2	2021	AUT	DISTINCTION	75	6	6
91707	Pharmacology 1	2021	AUT	FAIL	40	6	0
91132	Molecular Biology 1	2021	SPR	PASS	50	6	6
68041	Physical Aspects of Nature	2021	SPR	CREDIT	68	6	6
60001	Principles of Scientific Practice	2021	SPR	CREDIT	74	6	6
91148	Human Genetics and Precision Medicine	2022	605	PASS	61	6	6
91707	Pharmacology 1	2022	AUT	PASS	58	6	6

Total Credit Points Gained 78
GPA 4.29
WAM 62.93

C09074 Bachelor of Engineering (Honours) Bachelor of Medical Science
(Active)

Major in Flexible Engineering

Major in Pathology

Sub-Major in Biomedical Engineering

Sub-Major in Data Analytics

Sub-Major in Mechatronic Engineering

Exemptions		Result	Mark	Credit Enrolled	Points Gained
68037	Physical Modelling				6

University of Technology Sydney

Online Student Record

Jake Spencer Walklate
Student Number: 14030112

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(Active)

Major in Flexible Engineering

Major in Pathology

Sub-Major in Biomedical Engineering

Sub-Major in Data Analytics

Sub-Major in Mechatronic Engineering

Automatic Credit

33130	Mathematical Modelling 1	2020	SUM	CREDIT	68	6
33230	Mathematical Modelling 2	2021	AUT	DISTINCTION	75	6
48610	Introduction to Mechanical and Mechatronic Engineering	2020	SPR	CREDIT	72	6
65111	Chemistry 1	2020	680	PASS	59	6
65212	Chemistry 2	2021	605	CREDIT	65	6
91161	Cell Biology and Genetics	2020	SUM	CREDIT	65	6
91314	General Microbiology	2021	AUT	PASS	63	6

Enrolled Subjects

91180	Immunology and Human Health	2025	SPR	ENROLLED	6	
41099	Introduction to Mechatronics Engineering	2025	SPR	ENROLLED	6	
31005	Machine Learning	2025	SPR	ENROLLED	6	
42026	Biomedical Polymers	2026	AUT	ENROLLED	6	
48622	Embedded Mechatronics Systems	2026	AUT	ENROLLED	6	
49275	Neural Networks and Fuzzy Logic	2026	AUT	ENROLLED	6	
91827	Advanced Medical Biochemistry	2026	SPR	ENROLLED	6	
49261	Biomedical Instrumentation	2026	SPR	ENROLLED	6	
91829	Microbiology Diagnosis	2026	SPR	ENROLLED	6	

Completed Subjects

91320	Metabolic Biochemistry	2022	AUT	CREDIT	67	6	6
91178	Applications of Molecular Biology	2022	SPR	CREDIT	66	6	6
91400	Human Anatomy and Physiology	2022	SPR	CREDIT	74	6	6
48230	Introduction to Engineering Projects	2022	SPR	DISTINCTION	83	6	6
41035	Professional Practice Preparation 1	2022	SUM	PASS - NOT GRADED		3	3
91401	Immunology	2023	605	PASS	51	6	6
48240	Design and Innovation Fundamentals	2023	AUT	CREDIT	74	6	6

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> **Major** in Flexible Engineering
> **Major** in Pathology
> **Sub-Major in Biomedical Engineering**
> **Sub-Major in Data Analytics**
> **Sub-Major in Mechatronic Engineering**

91500	Histology	2023	AUT	PASS	55	6	6
48250	Economics and Finance for Engineering Projects	2024	AUT	CREDIT	66	6	6
41039	Programming 1	2024	AUT	PASS	59	6	6
31250	Introduction to Data Analytics	2024	SPR	PASS	63	6	6
48024	Programming 2	2024	SPR	HIGH DISTINCTION	85	6	6
60101	Chemistry and Materials Science	2025	AUT	CREDIT	66	6	6
48260	Engineering Project Management	2025	AUT	CREDIT	66	6	6
41160	Introduction to Biomedical Engineering	2025	AUT	CREDIT	72	6	6

Total Credit Points Gained **135**
GPA **4.91**
WAM **67.33**

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END OF E-RECORD

TAFE NSW

RTO Provider No. 90003
ABN 89755348137
Student No.: 377266625
Student Name: JAKE SPENCER WALKLATE

JAKE SPENCER WALKLATE
49 Holden Street
GOSFORD NSW 2250

TRANSCRIPT OF ACADEMIC RECORD as at 14-JAN-2021

Having been assessed in accordance with the requirements of the

Australian Qualifications Framework and TAFE NSW

you are eligible to receive

22334VIC Certificate IV in Cyber Security

Year	Code	Unit	Result
2020	BSBRES401	Analyse and present research information	Competent
2020	BSBWHS401	Implement and monitor WHS policies, procedures and programs to meet legislative requirements	Competent
2020	ICTPRG405	Automate processes	Competent
2020	ICTPRG407	Write script for software applications	Competent
2020	RIICOM301D	Communicate Information	Competent
2020	VU21988	Utilise basic network concepts and protocols required in cyber security	Competent
2020	VU21989	Test concepts and procedures for cyber security	Competent
2020	VU21990	Recognise the need for cyber security in an organisation	Competent
2020	VU21991	Implement network security infrastructure for an organisation	Competent
2020	VU21992	Develop a cyber security industry project	Competent
2020	VU21993	Secure a networked personal computer	Competent
2020	VU21994	Perform basic cyber security data analysis	Competent
2020	VU21995	Manage the security infrastructure for the organisation	Competent
2020	VU21996	Evaluate and test an incident response plan for an enterprise	Competent
2020	VU21997	Expose website security vulnerabilities	Competent

TAFE NSW

RTO Provider No. 90003
ABN 89755348137

Student No.: 377266625
Student Name: JAKE SPENCER WALKLATE

JAKE SPENCER WALKLATE
49 HOLDEN STREET
GOSFORD NSW 2250

OURIMBAH CAMPUS
BRUSH RD
OURIMBAH NSW 2258
Telephone: 131 601
Fax: 4348 4035

TRANSCRIPT OF ACADEMIC RECORD as at 16-Dec-2019

Having been assessed in accordance with the requirements of the

ICT Information and Communications Technology Training Package

you are eligible to receive

ICT40515 Certificate IV in Programming

Year	Code	Unit	Result
2019	ICTDBS403	Create basic databases	Competent
2019	ICTICT404	Use online learning tools	Competent
2019	ICTICT417	Identify, evaluate and apply current industry-specific technologies to meet industry standards	Competent
2019	ICTICT418	Contribute to copyright, ethics and privacy in an ICT environment	Competent
2019	ICTPRG402	Apply query language	Competent
2019	ICTPRG403	Develop data-driven applications	Competent
2019	ICTPRG404	Test applications	Competent
2019	ICTPRG405	Automate processes	Competent
2019	ICTPRG406	Apply introductory object-oriented language skills	Competent
2019	ICTPRG410	Build a user interface	Competent
2019	ICTPRG414	Apply introductory programming skills in another language	Competent
2019	ICTPRG415	Apply skills in object-oriented design	Competent
2019	ICTPRG418	Apply intermediate programming skills in another language	Competent
2019	ICTPRG419	Analyse software requirements	Competent
2019	ICTPRG527	Apply intermediate object-oriented language skills	Competent
2019	ICTWEB409	Develop cascading style sheets	Competent
2019	ICTWEB411	Produce basic client-side script for dynamic web pages	Competent
2019	ICTWEB429	Create a markup language document to specification	Competent

END OF TRANSCRIPT

This statement is issued without
alteration or erasure of any kind

MANAGING DIRECTOR

TAFE NSW

RTO Provider No. 90003
ABN 89755348137

Student No.: 377266625
Student Name: JAKE SPENCER WALKLATE

338720-001 001694(1998) R H1

JAKE SPENCER WALKLATE
49 HOLDEN STREET
GOSFORD NSW 2250

NSW GOVERNMENT | TAFE NSW

ST. LEONARDS CAMPUS
213 PACIFIC HWY
ST LEONARDS NSW 2065
Telephone: 131 674
Fax: 9942 0011

TRANSCRIPT OF ACADEMIC RECORD as at 03-Aug-2020

Having been assessed in accordance with the requirements of the

Australian Qualifications Framework and TAFE NSW

you are eligible to receive

Statement of Attainment in Networking Essentials

Year	Code	Unit	Result
2020	ICTNWK302	Determine and action network problems	Competent
2020	ICTNWK305	Install and manage network protocols	Competent

END OF TRANSCRIPT

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MANAGING DIRECTOR

NSW GOVERNMENT | TAFE NSW

JAKE SPENCER WALKLATE
26 STURT STREET
KILLARNEY VALE NSW 2261

WYONG CAMPUS
Porter Street
WYONG NSW 2259
Telephone: 131 225
Fax: 4350 2247

TRANSCRIPT OF ACADEMIC RECORD as at 20-SEP-2017

Having been assessed in accordance with the requirements of the

Australian Qualifications Framework and TAFE NSW

you are eligible to receive

10091NAT Certificate III in Employment and Training

Year	Code	Unit	Result
2016	ICAICT101A	Operate a personal computer	Competent
2016	ICAICT105A	Operate spreadsheet applications	Competent
2016	ICAICT106A	Operate presentation packages	Competent
2016	NSWTCOM212B	Use intercultural communication skills	Competent
2016	NSWTCOM306B	Write non-routine texts	Competent
2016	NSWTCOM307B	Demonstrate inclusive communication skills	Competent
2016	NSWTLRN301B	Draw conclusions from information for study purposes	Competent
2016	NSWTNMY303A	Use calculations in work and training contexts	Competent
2016	NSWTNMY304A	Use measurement in work and training contexts	Competent
2016	NSWTNMY305A	Read and interpret graphs, charts and tables in work and training context	Competent
2016	NSWTPLG302	Develop and implement a project	Competent
2016	NSWTPLG304A	Research and implement an action plan for employment and training	Competent
2016	NSWTRDG301B	Read and respond to non-routine texts	Competent
2016	NSWTSUS302B	Develop a personal action plan for environmental sustainability	Competent
2016	NSWTTMW301B	Apply team participation skills	Competent

END OF TRANSCRIPT

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MANAGING DIRECTOR