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| **Sam Young** | | | | |
| Mobile: [0451 261 028](tel://0451261028/) | Email: [samalexyoung@outlook.com](mailto:samalexyoung@outlook.com)  [LinkedIn](https://www.linkedin.com/in/samalexyoung/) | [GitHub](https://github.com/SamY492) | [Portfolio Website](https://samy492.github.io/) | | | | |
| **Experience** | | | | |
| **Communications Platforms Software Engineer APS 6** *Aug. 2022 – Present • 1 yr 10 mos* | | | Department of Home Affairs | |
| * Developed the following full stack web applications for a secure network to increase team efficiency:   + Communications Modem Manager: The application fixed 200+ errors between tracking platforms by intelligently highlighting discrepancies and remotely managing user access. *Utilised: Python, JavaScript, Flask, MySQL, HTML, CSS, Bootstrap, VMWare, Jira Service Management.*   + Asset Report Generator: Streamlined collection and presentation of physical asset data by a magnitude of 10. *Utilised: Python, TypeScript, Node, Express, React, MongoDB, Jira Service Management, Confluence, Ni-Fi* * Stood up six major software platforms – responsible for asset migrations, user onboarding, server configurations, automation scripts, LDAP integrations, certificates/firewalls and licensing. *Utilised: Python, FastAPI, Powershell, Jira Service Management, Confluence, VMWare, NiFi, Esri ArcGIS.* * Managed two undergraduate interns. Oversaw the entire project cycle – generating project briefs, providing technical guidance, reviewing progress and delivering weekly feedback. * System administrator for mobile, radio, camera and vehicle communications equipment. Certified installer and instructor of equipment handling. Responsible for setting up, provisioning, debugging and fixing equipment. * Tightened network security through implementation of automated Active Directory user/admin auditing scripts. *Utilised: Powershell, Active Directory.* | | | | |
| **Software Developer APS 5** *Jun. 2021 – Aug. 2022 • 1 yr 2 mos* | | | *Department of Home Affairs* | |
| * Technical representative for an inter-agency Virtual/Augmented Reality (VR/AR) project. Collaborated with domestic and international agencies to explore the integration of VR/AR technologies into government settings (e.g. digital twin cities; holoportation interviews; operational planning capabilities). * Developed several secure applications to service a client base of 500+ users, notably;   + User Manager – The program reduced issue requests by 26% through automating and auditing common account actions. *Utilised: Python, TypeScript, FastAPI, MySQL, Active Directory, HTML, CSS, MUI*   + Location Tracker – Mobile application for increased officer safety. *Utilised: Java, Android Studio, Kotlin* * Constructed a homepage landing website used daily by over 500+ users. | | | | |
| **Technologist Graduate APS 4** *Jun. 2020 – Jun. 2021 • 1 yr* | | | *Attorney General’s Department* | |
| * Built a semi-autonomous scraping tool to assist auditing message logs. The application significantly reduced administrative tasks the team had to undertake. * Deployed machine learning models for an object detection application – utilised Python libraries and transfer learning techniques to accelerate existing team workflows. * Researched and presented biometric analysis defeats to inform network security team on potential weaknesses in existing systems. | | | | |
| **Engineering & Information Sciences Research Assistant** *Nov. 2018 – Jun. 2020 • 1 yr* | | | University of Wollongong | |
| * Journal article lead author (2024) – Gesture Intention Framework for IR Device Teleoperation Using Novel PMG Soft Armband. * Conference paper lead author (2019) – Pattern Recognition for Prosthetic Hand User’s Intentions Using EMG Data and Machine Learning Techniques. * Developed a gesture recognition framework, soft pneumatic/electro-myographic armband and infrared emulator device. Increased gesture intention prediction accuracy from 83% to 94.8% using ML. | | | | |
| **Personal Projects** | | | | |
| * Co-inventor of Gesture-Teleoperated PMG Soft Armband (becoming patented) * Integrated thesis work with a 3D printed prosthetic hand to demonstrate the use of the armband/gesture recognition framework with transradial amputees. * WordPix * Developed an original word/picture puzzle web browser game. *Utilises: Python, JavaScript, Flask, HTML/CSS.* * Shmack! * Developed an original mind-puzzle mobile game. *Utilises C#, Unity, Custom Shaders*. * Word Cloud Poster Art SaaS * Created to automatically generate stylised poster art from a single text prompt and input picture. *Utilises: Wikipedia API, Pexels API, Python, OpenCV, PIL* * Reverse engineer games * Reverse engineered the following applications without tutorials: Flappy Bird, Wordle, Pacman, Pong, 2048, Bloxorz, Tetris, Snake, Sudoku, Minesweeper, Spell Bee. *Utilises: Unity, C#, JavaScript, HTML, CSS, Java, Android Studio, Kotlin, Python, PyGame* * Virtual experience program creator for future technologists. * Spearheaded the design and creation of a virtual experience program for future technologist graduates. Created a series of logic / tech-related puzzles of increasing difficulty and skillset utilisation. * Digit Strength and Mobility Analysis Glove * Designed a glove for heart stroke victim rehabilitation. Quantitatively measures user grip strength progression and gives immediate visual feedback for observational diagnosis. | | | | |
| **Education** | | | | |
| **University of Wollongong** *Jan. 2016 – Jun. 2020* | | | | |
| * Bachelor of Biomedical Engineering (Honours) (Scholar) (First Class) * WAM: High Distinction 93.5 – highest in graduating cohort * UOW Dean’s Merit List * Dean’s Scholar, Engineering Scholars and Advanced Scholarship * Engineering and Information Sciences Academic Achievement Scholarship * UOWx Award: 500+ hours accreditation | | | | |
| **Miscellaneous Courses** *Jun. 2020 - Present* | | | | |
| * Milestone Certified Integration Technician (MCIT) * Milestone Certified Design Engineer (MCDE) * CompTIA A+ Core 1 * Harvard Computer Science Course CS50x * Associate Android Developer Certification * Workspace One DDLS | | | | |
| **Skills** | | | | |
| **Software** | | **Hard Skills** | | **Soft Skills** |
| *Proficient*   * Python / Flask / FastAPI * JavaScript / TypeScript * React / MUI * Node / Express * HTML / CSS * MySQL * Atlassian Suite * Unity * Milestone | *Familiar*   * Django * C# * MongoDB * Powershell * Apache Ni-Fi * Bootstrap * Esri ArcGIS * VMware * Android Studio | * Full-stack application development * API development * Data analysis * Telecommunications admin * Biomedical device development * Pattern recognition/analysis | | * Communication * Teamwork * Problem solving * Interpersonal skills * Adaptability * Work ethic * Initiative |
| ***References available on request*** | | | | |