NOAH VENDRIG

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Sydney, NSW & Canberra, ACT

EMPLOYMENT

Software Development Consultant   **Dec 2023 - Present**

Hybrid Mobile App
- Developed a cross-platform mobile application for both Android and iOS.
- Enhanced user experience by integrating custom camera and 3D model viewer components, with functionality to support business needs.
- Developed initially with Flutter, but adapted to React Native to suit evolving client requirements.

Data Capture Web App
- Developed a web app with ReactJS, which enabled users to submit 1000+ images and responses.
- Secured data transmission from the app using AWS S3, Lambda and API Gateway to authenticate and generate pre-signed URLs for access.

Data Processing Optimisation
- Developed pre/postprocessing scripts in Python to manage and manipulate large CSV datasets.

Intern   **Firemark Ventures (IAG)**   **Nov 2020 - Nov 2020**
- Researched a pretrained deep neural network model, and used it for object detection.
- Developed a Python implementation of the YOLOv3 detection model, to visualise boat tracking in real footage.
- Reported on strengths and weaknesses of the model.
- Presented results to the staff of Firemark during weekly scrum meetings.

Marking Tutor   **Pre-Uni New College**   **2020 – 2023**
- Liaised between parents and office staff to ensure student needs were met.
- Supervised and managed the technological setup for weekly online lessons of multiple classrooms.

EDUCATION

B. Advanced Computing   **Australian National University**   **2023 – 2026**
- **Major: Cybersecurity** (in progress); Currently completing Cyber Security Foundations - Identifying vulnerabilities in Linux environments and C programs, with comprehensive documentation of attack vectors; Cryptography.
- **Course Representative** (Information Theory, 2023)
- **ANU Formula SAE** (Senior Team Member): Designed and fabricated the full exhaust system for the race car. Coordinated with other team members to complete development of other features of the car.
- AWS Cloud Quest: **Cloud Practitioner Certification** (07/23)

TECHNICAL EXPERIENCE

Projects
- **COVID-19 X-Ray Classifier** (2022). Created a web app in Flask, allowing users to upload images of lung x-rays, and view model evaluations for COVID-19. Model acheived 96% validation accuracy, on my custom dataset. **Python (Tensorflow, Pandas, Flask)**
- **Dynamic Memory Allocator** (2024). Segregated free list memory allocator, which has features such as: 75% metadata size reduction, Constant time coalescence with boundary tags, Multiple allocated chunks. **C**
- **Spotify MP3 Downloader** (2022). Searches Spotify playlists via the Spotify API and downloads corresponding YouTube tracks as MP3 files via a web interface. **Python (Flask, Youtube-dl), SpotifyAPI**
- **JSON Banking API** (2023). API to manage banking transactions with JWT authentication and secure user management, backed by a PostgreSQL database. **Go; PostgreSQL**
- **Portfolio Website** Deployed using AWS Route53, and S3 static website hosting. Uses AWS WAF and Cloudfront to keep the webserver secure. AWS GuardDuty, CloudWatch, and SNS notify the website admin when medium to high severity security breaches are detected. **AWS, JavaScript, HTML, CSS**

LANGUAGES AND TECHNOLOGIES
- Java; Python; C; TypeScript, Go;
- AWS; Docker; Firebase; React Native; ReactJS;