STEFAN NIO

Education

The University Of Western Australia

Dec 2024

Bachelor of Advanced Computer Science (Honours), Major in Artificial Intelligence

Perth, WA

Admitted within top 8% nationally — **GPA: 5.75**

Relevant Courses: Data Structures & Algorithms, Software Engineering with Java, Systems Programming, Machine Learning, Deep Learning, Computational Modelling, Computer Vision, Algorithms in Agents and AI, Agile Web Development

Professional Experience

CognixAI Dec 2024

Artificial Intelligence Engineer Intern

Sydney, NSW

- Developed an **AI-driven** content creation app that streamlined the process of generating and posting personalized content across social media platforms, improving user efficiency by **40%**, by integrating Hugging Face models, third-party AI APIs (text, video, and audio generation), and external data sources
- Enhanced content personalization by researching and prototyping AI models capable of **learning client-specific** writing styles, enabling more accurate content generation through fine-tuning and adaptive training techniques
- Integrated multiple external APIs (LinkedIn, X, Bing News, and etc) to provide users with real-time access to trending news, headlines, and topics, allowing for automated content recommendations that improved engagement rates by 30%
- Optimized AI model performance by refining data processing workflows in Python, ensuring seamless interaction between AI-generated content and social media automation tools like LinkedIn API, reducing processing time by 25%

Bayswater Mazda

Nov 2020 - Feb 2021

Software Accounting Intern

Bayswater, WA

- Accomplished the organization of over 15,000 tax invoice files, improving file retrieval efficiency by 40% by digitizing and appending them to the company's computer system
- Assisted in developing a **custom software solution** that streamlined the transfer of **5,000+** documents, reducing processing time by **60%** and cutting down **10 workdays** of manual effort each month
- Built automated Excel models with advanced functions (e.g., VLOOKUP, PivotTables, VBA) to improve data accuracy by 25% and support finance team reporting
- Collaborated with a cross-functional team of 6 employees to implement a document management solution, using Excel Macros and VBA to reduce file processing time by 40% while staying within budget

Projects

Seizure Type Classifier (Research) | Source Code

Tensorflow | Keras | Jupyter Notebook

- Achieved a 96% weighted F1-score in seizure classification by developing a WaveNet-BiLSTM deep learning model in TensorFlow with Keras, accurately classifying seven types of seizures from raw Electroencephalogram (EEG) data processed with Pandas in Jupyter Notebook
- Implemented a **custom WaveNet model** of stacked 1D convolutions with increasing dilation rates and a **channel-wise attention layer**, achieving an **8.9**% performance boost by refining focus on critical EEG channels; dataset processed with **Pandas** and results visualized with **Matplotlib**

ProblemHub | Source Code

ReactJS | Django | API

- Accomplished a 10-hour daily reduction in problem creation time by developing **ProblemHub**, a centralized repository for competitive programming problems that can be readily downloaded in problem-tools format, streamlining access and organization for the contest committee
- Built with a robust tech stack using **Next.js** and **React** for a dynamic frontend, **TailwindCSS** for streamlined styling, and **Axios** for efficient HTTP requests; implemented a **Django** backend with **SQLite** for data management, authentication, and **RESTful API** endpoints to support seamless frontend-backend integration

Technical Skills

Languages: Python, Java, SQL, HTML5, CSS, JavaScript, C, LaTeX, Markdown, Typescript

Developer Tools: Jupyter Notebook, Overleaf, TensorBoard, Git (and GitHub)

Libraries/Frameworks: ReactJS, SQLite, NextJS, TensorFlow, Keras, Scikit-learn, Docker, Django REST Framework,

Pandas, Matplotlib