

i Australian Citizen
+61 450 988 769

@ haolin@haolin.dev

www.haolin.devgithub.com/DragoniteHaolin

HAOLIN WU

I am a Software Engineer and Data Scientist with five years of industry experience developing in professional environments. During that time, I have handled entire software life-cycles including analysis, testing and DevOps, whilst working in teams both as a developer and project manager. My work has impacted hundreds of thousands of customers, and given me a customer-first mindset during the entire DevOps lifecycle.

With a double major degree in both computer science and data science, I am also well versed and have practical experience in web development, data integration, data visualization, data mining, high performance computing, and machine learning (incl. deep learning).

I am hard working, pay attention to detail, work well in teams, and manage my time well to meet deadlines.

EDUCATION

2020 - 2021 Bachelor of Science (Honours)

The University of Western Australia

Honours in Computer Science and Data Science

Research Topic: Deep Learning for Information Extraction from PDF Tables

First Class Honours, 6.375/7.0 GPA

2016 - 2019 Bachelor of Science (Double Major)

The University of Western Australia

Degree Specific Major: Computer Science

Second Major: Data Science

EXPERIENCE

2022 - current **Software Engineer**

Telstra

Working in Telstra Product Engineering developing and maintaining various components of Telstra.com. Lead the development in Telstra Outages, a tool used by millions of customers to visualize network outages and outage areas, as well as Telstra Navigation, the site-wide navigation menu used by customers and businesses for their mobile plans and devices. Engineering involved a variety of modern practices such as Test Driven Development (TDD), continuous integration and frameworks. Additionally, used logging and monitoring for traffic and statistics through Splunk and New Relic.

TypeScript / React / Spring / New Relic / AEM / Splunk / Java

2021 - 2022 **Software Engineer**

FairSupply Analytics Pty Ltd.

Developed a REST API using Django Rest Framework to replace an existing NoSQL database to improve referential integrity and scalability. The API integration was implemented within a legacy AngularJS application, and then containerized using Docker, with continuous integration through GitHub Actions. A Secure Development Lifecycle (SDLC) was used, along with Test Driven Development (TDD) approaches. The application was then deployed using AWS.

Django Rest Framework / Docker / Python / TDD / CI/CD / SDLC / AngularJS

2020 - 2021 part time **Casual Academic**

The University of Western Australia

Casual Academic for CITS3403 Agile Web Development and CITS3004 Cybersecurity. Teaching agile methodologies, Python3 web frameworks, and continuous integration and deployment techniques. Additionally teaching containerization through Docker, web vulnerabilities, white hat hacking, and cyber-attack prevention.

Python / Flask / Docker / Git / JS / PostgreSQL / CTFs

2019 - 2021 Full Stack Engineer

The Raine Study / UWA Centre for Software and Security Practice

Project management system developed for the Raine Study, a scientific study collecting data over 30 years from a cohort of participants. I used agile methodologies with Python/Django back-end and JQuery front-end technologies, while deploying to AWS services such as EC2, RDS, and S3.

Python / Django / Bootstrap / Git / JS / AWS

2018 - 2019 Front-End Developer

Corporate Governance Risk Pty Ltd

User interface and user experience (UI/UX) development of software for BHP, PwC, and other companies using Ruby and React.

JS / Bootstrap / Redux / React / CSS / JSX

2017 – 2018 Software Intern

UWA Centre for Software and Security Practice

Full stack development of a variety of small apps for clients of UWA CSSP.

Python / Django / HTML / CSS

HIGHLIGHTS

Startup

Archee - Agile Toolkit

A set of agile tools built from my own personal experience working in agile teams. Existing tools were often pay-walled, or had very poor user experience. To overcome these issues, I designed and built a solution to the popular agile planning strategy Planning Poker, and extended this to an agile toolkit, Archee. These tools are used free of charge by hundreds of users every month.

NextJS / React / TypeScript / Vercel / AWS / Websockets / PlanetScale

Research

Deep Learning for Information Extraction from PDF Tables

Honours research project exploring deep learning methods for extracting tabular semantics from tables inside PDFs into a machine readable format using **TensorFlow** and **PyTorch**. The research allowed for older PDF documents and forms such as maintenance procedures and medical discharge letters independent of domain to be stored as JSON and standardised. The project surveys, implements, and integrates Computer Vision and Natural Language Processing techniques for table extraction and semantic relation identification. The research project was eventually published as a paper.

Wu, Haolin, et al. Automatic semantic knowledge extraction from electronic forms. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability (2022): 1748006X221098272.

Projects

Various Projects

Some projects completed over the years include machine learning web applications, customer oriented user interfaces and a variety of API integrations and data management pipelines. These projects are developed using Test Driven Development (TDD), Continuous Integration and Deployment (CI/CD), and DevOps principles. These projects can be viewed in detail within my portfolio.

https://www.haolin.dev

ACHIEVEMENTS

2024	Telstra Product Engineering Champion of the Month
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Telstra

Recognised as the Product Engineering Chapter Champion, an award given for significant contributions to the business. Awarded for leading the development of Telstra Global Navigation

2022 Telstra Innovation Hackaton Semi-Finalist

Telstra

Developed a prototype concept for **Telstra Pay**, a product leveraging existing Telstra ecosystem resources to access the Buy now, Pay later market.

2022 Performance Review Commendation

Telstra

Scoring a perfect rating for Telstra's annual employee performance review

2020 Teaching Commendation

The University of Western Australia

For outstanding teaching in CITS3403, Agile Web Development

2018 Unearthed Hackathon Young Innovator Winner

Unearthed Solutions, Perth

Sponsored by BHP and Amazon AWS

2010-2014 Scotch College Dual Scholarship Recipient

Scotch College, Perth

Dual Scholarship Recipient in both Academics and Music

REFERENCES

Alvin Chong

Software and Product Engineering Feature Team Lead at Telstra +61 383 877 403 alvin.c.chong@team.telstra.com

Dr. David Glance

Information Security Consultant +61 408 916 579 david.glance@gmail.com

LANGUAGES

English - native Chinese Mandarin - fluent

Gerry Nelson

Former Software Engineering Chapter Lead at Telstra +61 427 072 141 gesunelson@yahoo.com

Professor Melinda Hodkiewicz

BHP Billiton Fellow, School of Engineering, The University of Western Australia +61 8 6488 7911 melinda.hodkiewicz@uwa.edu.au

HOBBIES

Coding is an art to me. In my spare time I enjoy automating tasks in my day to day life, such as smart home integration and some custom Fintech. I also love playing piano, acrylic painting, swimming, and fishing.

NON PROFIT

I created **Archee**, an agile toolkit to help planning sprints, after identifying the need of a planning tool in my team. I created software to manage the **UWA Information Security Society**, allowing weekly events and notifications. Additionally I taught English to international students at **Melbourne University**.