



DAVID TAN

🏠 Australian citizen

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📁 <https://gitlab.com/wtan0019>

Profile

Applying my high standard of discipline, fast learning ability, and practical communication skills to contribute and gain experience at the organisation. I have more than 2 years of data analysis experience in deep learning and machine learning models, and more than 5 years of experience in developing IT programming skills, including important skills in front-end and back-end areas (such as C / C++ , Python, R, and JavaScript. Recently, Computer Vision and Natural Language Process models are my research area in readiness for upcoming industry applications. I believe my skills, knowledge and data-driven passion will contribute significant values to your firm.

Work experience

Data Scientist

10/2019 – present

Broadspectrum, Clayton, VIC, Australia

Responsibility

- Develop and maintain actuarial modelling framework, review model design, model controls, model constraints and coding efficiency
- Take responsibility for actuarial modelling projects, utilise existing data for sophisticated statistical analysis and modelling work

Accomplishments

- Built machine learning models of NLP to extract vehicle data from IVMS system
- Automated the process of data validation, reduced the manual works of by 70%

Research Engineer

05/2019 – present

Monash Action Lab, Caulfield, VIC, Australia

Responsibility

- Develop audio broadcasting and video challenge game applications in real-time by using Python, NodeJs, React, Javascript and HTML5 languages.
- Provide vital technologies such as Web-socket and WebRTC applied to these applications.

Accomplishments

- Successfully implemented audio broadcasting application worked on RaspberryPi and mobile platforms.

Github link for the project: <https://github.com/davidtw999/audiobroadcasting>.

- Successfully implemented video chain online game.

Github link for the project: <https://github.com/davidtw999/videoChain>

Operation Manager

06/2017 – 12/2018

Umine Pty Ltd, Melbourne, VIC, Australia

Responsibility

- Participated in the team to build the website by using python with Django.
- Provided ongoing IT and technical support, including website and database.

Accomplishments

- Successfully delivered the website to the customers.
- Created the mining software by using Blockchain technology that applied to the cryptocurrency market.

Reporting Analyst

12/2012 – 01/2017

Malec Brothers Transport , Brighton east, Australia

Responsibilities

- Create daily reports in a spreadsheet format using graphs and charts for analysis
- Interacted with people from various levels of management.

Accomplishments

- Created an algorithm and models by using Excel for data analysis.
- Successfully analysed an extensive price/specification research as part of a solution to offer to clients.

Work experience

IT Support Analyst

Sinex Trading Pty Ltd, Melbourne, VIC, Australia

01/2010 – 12/2012

Responsibilities

- Routine maintenance of hardware and software
- Identify trends and advise peers and IT Operations Manager of recurring incidents

Accomplishments

- Successfully applied supply chain system for business use.
- Successfully developed the tabular data by using Excel tools.

Intern Software Developer

The Robot cup, Melbourne, VIC, Australia

06/2008 – 06/2009

Responsibility

- Designed a nominal path to play the soccer game.
- Controlled the wheeled robots travelling on a nominated route
- Adjusted accurate robot localisation by using odometry.

Accomplishments

- Successfully implemented a feedback system by using Dead Reckoning technology to adjust the response from the robot's wheels.
- Learned to use Lyapunov function to control the robot's motion.

Education

Data Science

Monash University, Caulfield, VIC, Australia

07/2017 – present

Master's degree

GPA: 3.55/4.0

WAM: 82.09/100.0

Mechatronics/Computer Science

The University of Melbourne, Melbourne, VIC, Australia

01/2004 – 06/2009

Bachelor's degree

GPA: 3.21/4.0 (Honours - H2B)

Skills

Back end programming

C
C++
Python
R
Bash/Shell



Operating System

Ubuntu
Mac OSX
Windows
Linux
Cloud service



Database

Oracle MySQL
MongoDB
Firebase



Big Data management

Apache Hadoop
Apache Spark
MapReduce



Front end programming

JavaScript/NodeJS
HTML
CSS



Data Visualisation

Tableau
D3 JavaScript
Power BI
R shiny



Data Analysis with ML modelling

Supervised Learning
(Python,R)
Unsupervised Learning
(Python,R)



Data Analysis with DL modelling

NLP
(TensorFlow/Keras)
CV (TensorFlow/Keras)



Data Wrangling

Data transformation
Data reshaping
Web crawler



Interpersonal

Communication Skills
Problem-solving
Teamwork



Awards

FIT5149 Apply Data Analysis

05/2019

Institute of Certified by Monash

<https://www.kaggle.com/c/fit5149-2019s1-ass2/leaderboard>

Top 1 team for sentiment analysis of Yelp reviews in Kaggle competition by using deep learning models (RNN-LSTM, ULMFIT and BERT)

Github: <https://github.com/davidtw999/ulmfitYlep>

Datacamp

<https://www.datacamp.com/profile/wtan0019>

Statement of accomplishment Intermedia Python, Pandas, R and etc.

Hobbies



Exploring
distant lands



Feeling the
music



Every kind of
sport



Social event



Reading the
book

References

Lan du

Broadspectrum

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Peter Chen

Monash Action Lab

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