## **Grant Holtes**

www.grantholtes.com | gwholtes@gmail.com | +61 404 288 322 | Melbourne, Australia

## Education

### **Graduate Diploma, Computer Science, University of Melbourne**

Mar 2021 – Present

The Graduate Diploma covers the equivalent of a major in Computer Science. This is a two year part time course.

## BCom Finance and Economics, minor in Engineering, University of Melbourne

Mar 2016 - Nov 2018

Minored in structural engineering alongside my commerce studies, providing a foundation of knowledge across finance, econometrics, corporate management, construction and public policy.

- Awarded the FBE medal for the highest final GPA in the Commerce Faculty
- First Class Honours (90%)
- Commerce Dean's List 2016, 2017, 2018 (top 3% of faculty for each year)
- BCom future leaders forum 2017, 2018

## Work Experience

### **Consultant at Deloitte Consulting, Melbourne**

Mar 2019 - Present

Currently working as a data scientist, developing computer vision solutions for traffic management. Previously provided data analysis and project management for a national telecommunications construction project and developed personalisation systems for ecommerce applications.

Responsibilities:

- Data science advisory and implementation, software development to implement ML solutions
- Project management
- Data analysis for financial, resource and workload planning
- Stakeholder management and executive presentations

#### Achievements:

- Developed a computer vision solution to analyse thousands of live CCTV feeds in a fog architecture
- Developed a lightweight vehicle tracking model that runs at 5x the framerate of SORT<sup>1</sup> for edge deployment
- Advised payments of A\$100M+ and A\$10M+ in resourcing on a telecommunications construction project
- Lead a small team to develop OCR solutions, saving 10,000 FTE hours

## Machine learning R&D Engineer at CreativeHub.io

Jan 2021 - Present

Developed a novel unsupervised ML model to quantify image style and allow users to search by image, with the aim of matching artists and marketing professionals.

## Responsibilities:

- Develop and test ML models in Python, Tensorflow
- Build web applications with Python, Flask, FastAPI
- Work with the CTO and CEO to manage project requirements, timeline and budget

### Achievements:

• Developed a lightweight solution to style capture, embedding and search

## Tutor at Queens College at the University of Melbourne

Mar 2017 - Jun 2020

Queens is an academic college at the University of Melbourne where I taught from my second year of university. Responsibilities:

• Taught undergraduate level economics and statistics students

## Achievements:

- 99% student pass rate
- Built communication and presentation skills

### Intern at Viburnum Funds, Perth

Nov 2017 - Dec 2017

Viburnum Funds is an Australian PE and strategic equities fund based in Perth.

• Provided research into potential investments

<sup>&</sup>lt;sup>1</sup> SORT is a a comparable and widely used object tracking model

## Extracurricular and Volunteer Activities

### **Treasurer for The Wyvern Society**

May 2019 - Present

Acting treasurer for The Wyvern Society, the alumni society for Queens College.

- Provisioned a fee relief for 13 students to mitigate the impact of Covid-19
- Produced yearly financial reports

## **Big Brothers Big Sisters**

Aug 2020 - Dec 2020

BBBS is a volunteer youth mentoring service, aiming to provide positive role models to young people

Developed scalable initiatives to reduce youth loneliness.

### **Data Scientist at Look and Learn**

May 2019 - Present

Look and Learn is a large online collection of historical imagery and illustrations.

• Lead a proof of concept project to develop a search engine that captures art style

## Writer at Towards Data Science, Hackernoon

Dec 2017 - Present

Hackernoon and Towards Data Science are the 4th and 13th largest online publications on Medium.com.

- Wrote on a range of technical subjects
- Writing viewed by 36,000 people

### **Side Projects**

For a full list of side projects please see www.grantholtes.com

## Food desert mapping in Victoria

Jul 2020

Studied the relationship between income and access to essential retail providers in Victoria.

### SortStream - Document sorting software

Feb 2020 - Jun 2020

Developed software to automate document sorting using language processing and statistics.

#### Viral fashion investigation

Jan 2019

Developed a simulation to understand why Germans stopped wearing ties in the office using methods from epidemiology.

## Navigation app for urban cyclists

Dec 2018

Designed and built an app to provide a new method for navigating urban environments and fix issues with Google maps.

## Unbeatable connect 4 game

2017

Built a connect 4 player that always wins.

## Technologies, Skills, Work Rights

Passports: New Zealand, South Africa, Netherlands

Work Rights: Australia, EU, South Africa and New Zealand

### Skills:

Analytical problem solving, Statistical modelling, Operations, PMO, Client relationship management, Presentation, Machine Learning, Programming

## **Technologies:**

Proficient in: Python, R, Excel

Working knowledge of: SQL, Stata, SAS, MATLAB, Julia, AWS Currently studying: AWS development, Computer science

# Other Areas of Interest

# Hiking

The abundance of high-quality trails in New Zealand fostered a keen interest and enjoyment of hiking while I completed my secondary schooling.

## Cycling

I have enjoyed cycling both on and off the road throughout my life in Melbourne, Auckland and Cape Town.

## **Computer Vision, Natural Language Processing**

I have enjoyed the challenge of researching and implementing systems to interpret images and human generated text.