## **DEVIN TAYLOR**

## **Machine Learning Engineer**

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British citizenship

% devintaylor.me

github.com/Devin-Taylor

## **EDUCATION**

## University of Cambridge

## **Master of Philosophy Advanced Computer Science**

**♀** Cambridge, United Kingdom

Mov 2018 - July 2019

• Grade: Distinction

- **Dissertation:** Hierarchical multi-head co-attention for interpretable cross-modal deep learning
- Subjects: Machine learning, probabilistic machine learning, large scale data processing and optimisation, advanced topics in mobile and sensor systems, mobile robot systems

# University of the Witwatersrand Bachelor of Science Engineering (Electrical)

**♀** Johannesburg, South Africa

• **Dissertation:** Accelerometer-based modulated artificial horizon system for countering motion sickness

## University of the Witwatersrand Bachelor of Engineering Science Biomedical Engineering

Johannesburg, South Africa

# Jan 2012 - Dec 2014

## RESEARCH EXPERIENCE

## Refereed workshop publications

• Taylor, D., Spasov, S., Liò, P., "Co-Attentive Cross-Modal Deep Learning for Medical Evidence Synthesis and Decision Making". In machine learning for health workshop, NeurIPS, Vancouver, Canada (2019).

#### **Organising**

- Conferences: IndabaX South Africa 2020
- Tutorials: Deep Learning Indaba Kenya 2019

#### Reviewing

- Workshops: ML4H (NeurIPS) 2019, ML4H (NeurIPS) 2020
- Conferences: ACM CHIL 2020

## **HONORS & AWARDS**

- MIT Press poster award, Deep Learning Indaba (2019)
- Nedbank Masters Scholarship (2018)
- Most Innovative Honours Project Award (2016)
- Represented University of the Witwatersrand at the SAIEE national student project competition (2016)
- Entelect award for best Software Development II project (2015)
- Dean's list (2014, 2013)

## **SKILLS**

Python, C++, R, PyTorch, Tensorflow Go, Matlab, SQL Assembly, Julia



## **WORK EXPERIENCE**

## WovenLight

#### **Data Scientist**

**♀** London, United Kingdom

🛗 Jan 2021 - present

## Nedbank CIB

#### **Quantitative Trader**

**♀** Johannesburg, South Africa

Mov 2020 - Jan 2021

 Designed and built centralised platform for all trading activity and data storage using Python, Apache Airflow, Kafka, PostgreSQL and Docker.

## **Software Engineer**

♥ Johannesburg, South Africa

## Aug 2019 - Nov 2020

• Build C++ back-end for high throughput trading platform and implemented different trading models.

## Isaz

## Machine Learning Researcher (part-time)

**♀** Remote

m June 2020 - Jan 2021

• Time series forecasting in the FMCG sector.

#### **Data Scientist**

**♀** Johannesburg, South Africa

- Technical lead of a team of four in developing a web-based, GCP hosted product to extract structured data from unstructured images. Responsibilities included developing the Python back-end and APIs, implementing machine learning and computer vision algorithms, engaging with stakeholders, project management, and client deployment.
- Industry supervisor for four students in MS in Data Science at the University of San Francisco. Research focused on two projects: CNNs for diagnosing paediatric patient x-rays, and autoencoders for biomarker identification in breast cancer genetic data.
- Data science consultant focused on improving client retention for a client in the insurance sector. Responsibilities included building machine learning models in R and managing result communication to client.

#### Data Scientist (part-time)

**♀** Johannesburg, South Africa

 Built Python back-end used to track advertisements on radio stations, including a custom audio fingerprinting algorithm.
 System was distributed across clusters of Raspberry Pis.

## **PROJECTS**

- MultiAug Python base multimodal data augmentation library used in training multimodal machine learning models.
- CNN uncertainty add uncertainty estimations to CNN predictions with Gaussian processes using PyTorch and GPy-Torch.
- Web client, server, proxy multihreaded Go web client, server, and proxy supporting both TCP and UDP protocols.