# **DEVIN TAYLOR**

## **Machine Learning Engineer**

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**Q** U.K. work authorised

% devintaylor.me

ngithub.com/Devin-Taylor

# **EDUCATION**

## **University of Cambridge**

Master of Philosophy Advanced Computer Science

Mov 2018 - July 2019

- Grade: Distinction (4.0 GPA equivalent)
- 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) (Information)

m Jan 2015 - Dec 2016

- **◊** Johannesburg, South Africa
- **Dissertation:** Accelerometer-based modulated artificial horizon system for countering motion sickness

Bachelor of Engineering Science Biomedical Engineering

m Jan 2012 - Dec 2014

**♀** Johannesburg, South Africa

## **RESEARCH**

### Refereed workshop publications

• Taylor, D., Spasov, S., Li'o, 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
- Conferences: ACM CHIL 2020

#### **Supervisor**

- Industry co-supervisor for MS in Data Science at University of San Francisco:
  - o 2017/18 CNNs for diagnosing paediatric patient x-rays.
  - o 2018/19 Autoencoders for biomarker identification in breast cancer genetic data.

### **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)

## **EXPERIENCE**

#### Isazi (Research)

Machine Learning Researcher (part-time)

June 2020 - present

**♀** Johannesburg, South Africa

#### **Nedbank CIB**

#### Software Engineer

Aug 2019 – present

- Johannesburg, South Africa
- Design and build back-end software for trading platform
- Design and implement algorithmic trading strategies.

#### Isazi

#### **Data Scientist**

- **♀** Johannesburg, South Africa
- Technical lead in product development. Managed a team in designing, developing and deploying a scalable machine learning product.
- Data science consultant. Identified, scoped, and implemented data science solutions for various clients.
- Machine learning researcher facilitating product development.

#### Data Scientist (part-time)

m Dec 2015 - Nov 2016

**♀** Johannesburg, South Africa

• Design and build hardware and software for automated tracking of advertisements played on radio stations.

#### **Aerial Monitoring Solutions**

Software Engineer Intern

**#** June 2015 – July 2015

**♀** Johannesburg, South Africa

• Design and develop front-end and back-end of application for drone ground control station.

# **PROJECTS**

- shenaniGAN develop and maintain a library replicating published multimodal conditional GAN architectures, inluding personal research.
- MultiAug develop and maintain a library for multimodal data augmentation used in training multimodal machine learning models.
- CNN uncertainty combine Gaussian processes with CNNs to add accurate uncertainty estimations to CNN predictions.
- Email server develop and maintain an email server library for use in bulk mailing conference applicants/attendees.

### **SKILLS**

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

