DEVIN TAYLOR

Machine Learning Engineer

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Q U.K. work authorised

% 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) (Information)

♀ Johannesburg, South Africa

m Jan 2015 - Dec 2016

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

Bachelor of Engineering Science Biomedical Engineering

♀ Johannesburg, South Africa

m Jan 2012 - Dec 2014

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

Nedbank CIB

Software Engineer

♀ Johannesburg, South Africa

Aug 2019 - present

- Design and build back-end software for trading platform.
- Design and implement algorithmic trading strategies.

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Machine Learning Researcher (part-time)

♀ Johannesburg, South Africa

🛗 June 2020 - present

• Researcher in time series forecasting.

Data Scientist

♀ Johannesburg, South Africa

m Dec 2016 - Sep 2018

- 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)

◊ Johannesburg, South Africa

m Dec 2015 - Nov 2016

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

Aerial Monitoring Solutions

Software Engineer Intern

♀ Johannesburg, South Africa

June 2015 - July 2015

• 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.
- 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 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

