

DEVIN TAYLOR

Machine Learning Engineer

@ devintaylor@cantab.net

📍 U.K. work authorised

🌐 devintaylor.me

🐙 github.com/Devin-Taylor

EDUCATION

University of Cambridge

Master of Philosophy Advanced Computer Science

📅 Nov 2018 – July 2019 📍 Cambridge, United Kingdom

- **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)

📅 Jan 2015 – Dec 2016 📍 Johannesburg, South Africa

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

Bachelor of Engineering Science Biomedical Engineering

📅 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:
 - 2017/18 - CNNs for diagnosing paediatric patient x-rays.
 - 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

📅 Nov 2019 – present 📍 Johannesburg, South Africa

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

Isazi

Data Scientist

📅 Dec 2016 – Sep 2018 📍 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)

📅 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, including 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

