

## **Devon Jarvis - CURRICULUM VITAE**

### **Personal Information**

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**Website: <https://jarvisdevon.github.io/>**

NATIONALITY:              **South African**

### **Education**

UNIVERSITY ATTENDED:      **University of the Witwatersrand**

QUALIFICATIONS:      **Master of Science (Dissertation) in the field of Computer Science (graduated with Distinction) (2020-2021)**

- Supervisors: Dr. Richard Klein,  
                         Prof. Benjamin Rosman,  
                         Prof. Andrew Saxe
- Thesis: Generalizing Regularization of Neural Networks to Correlated Parameter Spaces.

**Bachelor of Science with Honours in the field of Computer Science (graduated with Distinction) (2019)**

**Bachelor of Science in Computer Science and Economic Science (graduated with Distinction) (2016-2018)**

AWARDS:                      **The Samuel Goodman Memorial Medal (2019)** - This gold medal is awarded annually to the most distinguished Honours graduate in the Faculty of Science (*Top Honours student in Science Faculty*).

**PSYBERGATE Computer Science III Prize (2018)** – Awarded for excellence in the final year of study in Computer Science (*Summa Cum Laude in Computer Science III*).

**PSYBERGATE Computer Science Alumni Prize for the Best Student Tutor (2020)** - awarded annually to the Honours or postgraduate student who makes the biggest contribution to supporting teaching in the School through their tutoring of, or demonstrating to, undergraduate students.

**Dean's List (2016, 2017, 2018, 2019)**

**Postgraduate Merit Award (2019, 2020)**

#### **Additional Achievements:**

- **Research Incentive Prize Sponsored by Huawei at Computer Science and Applied Mathematics Honours Innovation Day 2017**
- **Undergraduate University Council Merit Scholarship (2017, 2018)**
- **3<sup>rd</sup> at the Centre for High Performance Computing Cluster Competition (2017)**
- **Golden Key**

## **Work Experience**

UNIVERSITY OF THE  
WITWATERSRAND

**Head Tutor Computer Science IV: Computer Vision (2020),  
Mathematical Foundations of Data Science, Natural Language  
Processing (2021)**

**Head Tutor Computer Science III: Machine Learning, Computer  
Graphics and Visualization (2020)**

**Academic Tutor for Computer Science II and Computer Science III  
(2019)**

**Instructed 1<sup>st</sup> and 2<sup>nd</sup> year Computer Science and Applied  
Mathematics students in a semester workshop - "Introduction to  
Linux" (2018)**

## **Volunteer Work Experience**

1DAY SOONER

**1Day Africa Research Lead (January 2021 - Present)**

**1Day Sooner Volunteer Organizer (August 2020 - Present)**

RELEVANT LINKS

<https://1dayafrica.org/about-1day-africa>  
<https://www.1daysooner.org/team>

## **Academic Writing**

- **The role of learning regime, architecture and dataset structure on systematic generalization in simple neural networks.**  
Co-authors: Dr. Richard Klein, Prof. Benjamin Rosman, Prof. Andrew Saxe  
In: Submitted to The Tenth International Conference on Learning Representations, 2022.  
URL <https://openreview.net/forum?id=3r034NfDKnL>. under review.  
(de-anonymized for application only, UCL is in conflict domain)
- **Generalizing Regularization of Neural Networks to Correlated Parameter Spaces**  
(Masters Dissertation): [https://jarvisdevon.github.io/jarvis\\_dissertation.pdf](https://jarvisdevon.github.io/jarvis_dissertation.pdf)  
Supervisors: Dr. Richard Klein, Prof. Benjamin Rosman, Prof. Andrew Saxe

## **Opinion Editorials**

- **African countries need to be involved in Covid-19 human challenge vaccine trials:**  
<https://www.dailymaverick.co.za/opinionista/2020-12-16-african-countries-need-to-be-involved-in-covid-19-human-challenge-vaccine-trials/>

## **Summer Schools**

- **Google Deep Learning Indaba, 2018**
- **Google Deep Learning Indaba, 2019**
- **Oxford Machine Learning Summer School, 2020**
- **International Symposium on Artificial Intelligence and Brain Science, 2020**

## **Relevant Skills**

PROGRAMMING  
LANGUAGES

**C++, Java, C, Python (including NumPy, SciPy, Pandas), Javascript**

SOFTWARE  
LIBRARIES

**Machine Learning with Jax, Tensorflow, PyTorch, Autograd;  
Robot Operating System (ROS)**