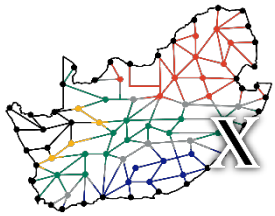
DEEP LEARNING INDABAX SOUTH AFRICA 2019



14 - 17 APRIL 2019

UNITE Building
University of KwaZulu-Natal
Durban

DEEP LEARNING INDABAX SOUTH AFRICA 2019



ABOUT US

The Deep Learning IndabaX is a locally-organised meeting that helps ensure that knowledge and capacity in machine learning are spread more widely across the continent. The IndabaX is a means with which to experiment with the ways in which we strengthen African machine learning and its local communities, allowing more people to contribute to the conversation around machine learning and artificial intelligence. IndabaX events are local versions of the Deep Learning Indaba, which will be held this year in Nairobi, Kenya.

LIST OF ORGANISERS

AMIRA ABBAS
University of KwaZulu-Natal

CHRISTOPHER CURRIN
University of Cape Town

ANBAN PILLAY
University of KwaZulu-Natal

JAMES ALLINGHAM
Wolfram Research

STEVEN JAMES
University of the Witwatersrand

MARIA SCHULD
University of KwaZulu-Natal

ANNIKA BRUNDYN
University of Cape Town

SASHA NAIDOO
Nedbank

SICELUKWANDA ZWANE
University of the Witwatersrand

ALEX CONWAY
NumberBoost

ANDREW PASKARAMOORTHY
University of the Witwatersrand

VENUE INFO

All talks take place at the UNITE Building, University of KwaZulu-Natal. The discussion, keynote and research talks take place in the Lecture Theatre. Foundation talks occur in Rooms 4 and 5, and industry, ethics and policy talks take place in Rooms 1, 2 and 3. The opening event will take place at the PYC Yacht Club, 3 Maritime Pl, Harbour, Durban.

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TRACKS

KEYNOTE

FOUNDATIONS

RESEARCH

INDUSTRY, ETHICS & POLICY

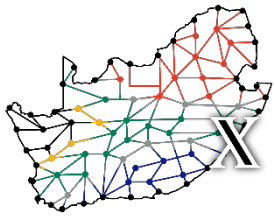
HACKATHON

UNCONFERENCE

OVERVIEW

	14 April **SUNDAY**	15 April **MONDAY**	16 April **TUESDAY**	17 April **WEDNESDAY**
08h30		Opening Remarks (15 mins)		
09h00		Discussion: Africa in AI		
09h30				
10h00				
10h30		Tea Break	Tea Break	
11h00				
11h30				
12h00				
12h30				
13h00		Lunch	Lunch	
13h30				
14h00				
14h30				
15h00	Registration			Prizegiving and Closing
15h30		Tea Break	Tea Break	
16h00				
16h30				
17h00				
17h30		Poster Session		
18h00	Opening Event			
18h30				
19h00				
19h30				
20h00				

DEEP LEARNING INDABAX SOUTH AFRICA 2019



DAY 0

Sunday, 14 April

ATTENDEE REGISTRATION — **15h00 - 18h00**

UNITE Building, University of KwaZulu-Natal

OPENING EVENT — **18h00 - 22h00**

PYC Yacht Club, 3 Maritime Place, Harbour, Durban

DAY 1

Monday, 15 April

OPENING REMARKS — **08h30 - 08h45**

OPENING DISCUSSION: AFRICA IN AI — **08h45 - 10h30**

Tshilidzi Marwala, Benjamin Rosman, Justine Nasejje, Pelonomi Moiloa, Jade Abbott, Sicelukwanda Zwane & Chris Currin

TEA BREAK — **10h30 - 11h00**

KEYNOTE I

Tshilidzi Marwala: On the Rationality of Artificial Intelligence Machines — **11h00 - 13h00**

LUNCH — **13h00 - 14h00**

FOUNDATIONS I

Kerryn Gammie: Animated Intro to Machine Learning — **14h00 - 15h30**

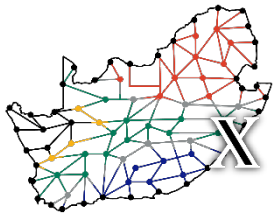
RESEARCH I

Ndivhuwo Makondo: Machine Learning For Robot Control — **14h00 - 14h30**

Ashley Gritzman: Will Capsule Networks Replace CNNs? — **14h30 - 15h00**

Terence van Zyl: Random Neural Networks — **15h00 - 15h30**

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INDUSTRY, ETHICS & POLICY I

Nick Bradshaw: Community Development as an Avenue to Career Growth	**14h00 - 14h20**
Alex Conway: Sebenz.ai - Creating Jobs in South Africa using Smartphone Data Labeling	**14h20 - 15h00**
Jade Abbott: Machine Learning in Real Life	**15h00 - 15h30**

TEA BREAK **15h30 - 16h00**

FOUNDATIONS II

Richard Klein: Introduction to Deep Learning	**16h00 - 17h30**

RESEARCH II

Emli-Mari Nel: Ticker: An Adaptive Single-Switch Text Entry Method for Visually Impaired Users	**16h00 - 16h30**
Sebastian Bodenstein & Taliesin Beynon: Deep Learning Vs The Brain	**16h30 - 17h00**
James Allingham: Missing Data Imputation	**17h00 - 17h30**

INDUSTRY, ETHICS & POLICY II

Nick Pentreath: The IBM Developer Model Asset Exchange - Deep Learning For Everyone	**16h00 - 16h30**
Stuart Reid: The Temporal Turing Test: Sampling Real-Valued Multivariate Time Series from Deep Generative Models	**16h30 - 17h00**
Jan Krynauw & Zander Lee: Humans in the Loop - New Ways of Working in a Deep Learning World	**17h00 - 17h30**

POSTER SESSION

Hosted in the Foyer. Snacks and drinks provided	**17h30- 20h00**

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DAY 2

Tuesday, 16 April

KEYNOTE II

Andrew Saxe: High-Dimensional Dynamics of Generalization Error in Neural Networks: Insights from the Linear Case	**08h30 - 10h30**
TEA BREAK	**10h30 - 11h00**

FOUNDATIONS III

Wiebke Toussaint: Unsupervised Machine Learning 101	**11h00 - 12h00**
Edgar Jembere: Introduction to Natural Language Processing	**12h00 - 13h00**

RESEARCH III

Justine Nasejje: Using Conditional Inference Forests to Model Time to Event Data	**11h00 - 11h30**
Willie Brink: Visual-Semantic Embeddings: An Introduction and Applications	**11h30 - 12h15**
Benjamin Rosman: Exploiting Structure for Accelerating Reinforcement Learning	**12h15 - 13h00**

INDUSTRY, ETHICS & POLICY III

Jacques Ludik: Digital Transformation Journey in Operationalizing AI Solutions to Help Businesses Thrive in the Smart Technology Era	**11h00 - 11h30**
Quentin Williams: AI + Humans in Business: Progeny or Friendship	**11h30 - 12h00**
Pelonomi Moiloa: Protecting Machines from us - Ethics and Bias	**12h00 - 12h30**
Matthew Adendorff: Civic Technology and AI - Meaningful Opportunities and Daunting Biases	**12h30 - 13h00**
LUNCH	**13h00 - 14h00**

FOUNDATIONS IV

Jonathan Shock: A Guided Tour through the Landscape of Reinforcement Learning	**14h00 - 15h30**

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RESEARCH IV

Christopher Cleghorn: Black-Box Optimization and its Role in Machine Learning — **14h00 - 14h45**

Maria Schuld: Machine Learning with Quantum Computers — **14h45 - 15h30**

INDUSTRY, ETHICS & POLICY IV

John Poole: Centre for High Performance Computing: Resources for Deep Learning at the CHPC — **14h00 - 14h30**

Michelle Hoogenhout: Growing young talent: Selecting and training the next generation of data scientists — **14h30 - 15h00**

Dario Fannucchi: A Tour of Machine Learning in the African Business Context: 5 Years of Awesome Ideas, Dramatic Flops and Big Wins — **15h00 - 15h30**

TEA BREAK — **15h30 - 16h00**

KEYNOTE III

Bruce Bassett: An AI Play in 3 Parts: Jacuzzis, Research and AGI — **16h00 - 17h30**

HACKATHON OPENING

Hosted in the Lecture Theatre and LAN until 01h00 — **17h30 - Onward**

DAY 3

Wednesday, 17 April

HACKATHON CONTINUES

Hosted in the LAN and Rooms 1, 2 and 3 — **08h30 - 15h00**

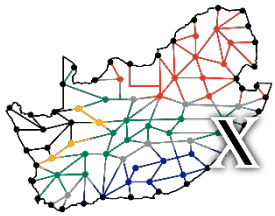
UNCONFERENCE

Hosted in the Lecture Theatre and Rooms 1, 2 and 3 — **08h30 - 15h00**

PRIZE-GIVING AND CLOSING REMARKS

Poster winner and hackathon prizes announced — **15h00 - 15h30**

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