CHRISTINE DE KOCK | PhD CANDIDATE

I am a third year **PhD candidate in Computer Science** in the NLIP Group at Cambridge, working with Dr Andreas Vlachos. My research focuses on modelling conversations, with specific application to **disagreements online**. My studies are funded by the Huawei Dialogue Studentship and the Oppenheimer Memorial Trust. I hold an **MSc in Artificial Intelligence** (*cum laude*) from the **University of Edinburgh**. My undergraduate degree was in Industrial Engineering, with a focus on data mining. I have worked on machine learning problems in a variety of domains, including recommender systems, radio frequency signal detection, fraud detection, and targeted advertising.

PERSONAL INFORMATION

NATIONALITY:	South African	BASED IN:	Cambridge, UK
DATE OF BIRTH:	11/01/1993	LANGUAGES:	English (native)
PHONE:	+27 82 778 0066		Afrikaans (native)
EMAIL:	christinedekock11@gmail.com		German (conversational)

EDUCATION

2019 - curr

PhD IN COMPUTER SCIENCE
The University of Cambridge | Cambridge, UK
THESIS: "Modelling constructiveness in online disagreements"
See publications below

FUNDING:
- The **Oppenheimer Memorial Trust** scholarship for international postgraduate study.
- Recipient of the **Huawei Dialogue Studentship**.
- **Cambridge Language Sciences** Incubator Fund 2021.

2016 - 2017

MASTER OF SCIENCE IN ARTIFICIAL INTELLIGENCE, *cum laude*
The University of Edinburgh | Edinburgh, UK
THESIS: "Personalised news recommendation in the Afrikaans language" (78%)
FUNDING:
- The **Oppenheimer Memorial Trust** scholarship for international postgraduate study.
- Industrial funding from **Naspers Ltd.**

AWARDS:
- The **Claire Jones Award** for the top performing female student in Informatics (2017).

ELECTIVES:
- Machine Learning & Pattern Recognition : 77%
- Accelerated Natural Language Processing: 81%
- Machine Learning Practical: 91%
- Advanced Topics in the Foundations of Databases: 80%
- Data Mining and Exploration: 86%
- Natural Language Understanding: 75%

2012 - 2015

BACHELOR OF ENGINEERING IN INDUSTRIAL ENGINEERING
Stellenbosch University | Stellenbosch, South Africa
THESIS: "Data mining for print media advertising" (90%)
HONOURS AVERAGE: 78%
AWARDS:
- Rector's Award for **Excellent Achievement in Leadership** (2014)
- Lecturers' Award for **Industrial Engineering Ambassador** (2015)
- Runner up: **Best final year project** in Industrial Engineering (2015).
- **Golden Key Honour Society** (top 15% per field of study, 2013).

Dec 2011	National Senior Certificate
	Diamantveld High School	Kimberley, South Africa
	Average: 93%
	Awards:
	• Overall top student in the Northern Cape Province (2011)
	• Top student in English in the Northern Cape Province (2011).
	• School's highest honours for academic achievement (twice) and culture.

Work Experience

July 2022 - Oct 2022

Research Intern | **Twitter Inc, London and San Francisco**

Offline evaluation of a transformer-based recommender system to replace the current home timeline ranker. This involved setting up the data pipelines, comparing different model architectures, training in PyTorch, and optimising for very large scale training.
Languages / technologies: Python, SQL, GCP, Docker

Jan 2021 - April 2021

Research Intern | **Wikimedia Foundation**

Proposed and executed a project on the effects of collaboration patterns on article quality. This comprised of creating a dataset using PySpark, cleaning and analysing the data, designing and implementing features, and developing predictive models.
Languages / technologies: Python, Spark, SQL

Dec 2018 - May 2019

Science volunteer in Antarctica | **South African National Space Agency**

As a science volunteer in the South African National Antarctic Programme, I participated in two expeditions to South African stations in the Antarctic region: SANAE IV on the Antarctic continent (Dec-March), and Marion Island in the Southern Ocean (April-May). Our team was performed maintenance and upgrades to space weather monitoring instruments on behalf of the South African National Space Agency.

Sept 2018 - Sept 2020

Artificial Intelligence Specialist | **Naspers Ltd, Amsterdam**

Developing a machine learning approach for detecting fraud in online classified ads for OLX, a major international classifieds company. My focus was on the application of NLP techniques to find signals in postings and messages.

Data Scientist | **Media24 (a subsidiary of Naspers), South Africa**

Media24 is Africa's largest media company. As data scientist, my main responsibility was working with a team of developers to productionise the news recommendation approach developed in my Masters dissertation. More broadly, it also included identifying opportunities for AI applications, developing POCs and illustrating their usefulness.
Awards: Included in the **Mail & Guardian**'s 200 Young South Africans (2018).
Languages / technologies: Python, SQL, R, GCP, AWS

Jan 2016 - Sep 2016

Junior Data Scientist | **The Square Kilometre Array, South Africa**

The Square Kilometre Array project is an international endeavour to build the world's largest radio telescope. I was part of a research group who applied machine learning and data analytics techniques to aid astronomical discovery in terabyte-scale data. My research project was on pulsar classification using neural networks.
Languages / technologies: Python, R, MatLab, limited C++