

Fabio J. Fehr

Research assistant at Idiap, Ph.D. student at EPFL

May 23, 1996, Swiss + South African

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Github Profile in LinkedIn Profile

Research Profile

About me

I am an individual who is enthusiastic. reliable and tenacious. I take a statistical approach to life. Given a 1% chance of success, I am prepared to try at least 100 times. My research interests are in machine learning, statistics and natural language processing. I thrive on regular exercise and enjoy outdoor activities such as hiking, skiing and surfing. My hobbies include: reading, playing classical music and growing bonsai.

Interests



Languages

English Afrikaans French German 0 0 0 0

Working

2021-2024 Research Assistant Working in the Natural Language Understanding group at Idiap. 2018 **Intern Machine Learning Engineer** DataProphet Implementing transfer learning for RNN and CNN models for financial time-series data. 2017 - 2018 **Intern Data Scientist** I worked on a team project for the water crisis in Cape Town. There-

after, working with Eighty20's Big Data Portal in SQL.

Education

2021 – 2024 **Doctor of Philosophy in Electrical Engineering** FPFI Working in the intersection of machine learning and natural language processing, with an emphasis on representation learning for the meaning of language, attention-based deep learning models, and structured prediction. **PhD Research**

Currently working on combining Bayesian non-parametrics methods with attention-based deep learning language models.

2019 - 2020 Masters in Advanced Analytics (Full bursary) Statistics specialisation. A two year masters degree including coursework and dissertation. Awarded SASA-NRF grant funding. **Master Thesis** A comprehensive comparison study of Gaussian processes and vari-

ational autoencoders for statistical shape modelling of 3D meshes. 2015 – 2018 **Bachelors of Business Science in Analytics**

A diverse degree with a focus on Statistics, Mathematics and Computer Science. Honours year specialisation in statistics.

Honours Thesis (Distinction) Text Content Classification on News Articles: Using natural language processing and machine learning techniques to classify text articles. This was presented at the South African Statistical Association (SASA) conference in 2019.

UCT

Teaching

2021-2024	Teaching Assistant	EPFL
	Working as a TA for machine learning and NLP courses at	EPFL.
2020-2021	Engagement Tutor	GetSmarter
	Tutor for in Business Analytics (UCT) and Machine Learning	ng (LSE).
2019 – 2020	Subject Matter Expert	GetSmarter
	Building two online courses: Business Analytics (UCT) and	d Machine
	Learning (LSE).	
2017 – 2020	Head Tutor: Statistics	UCT
	Managing, coordination, tutoring and assistant lecturing.	

Community

2013 – 2019 **Lifesaving Squad Leader** Llandudno Surf Lifesaving Club, leading a squad of 25 young lifeguards. 100 hours p.a community service. 2016 - 2019 **Surf Club Chairman** Management of a team, organisation of events, working with brands. Community outreach and adaptive surfing. 25 hours p.a community service. Club of the year and transformation trophy for 2019.

References

Dr James Henderson	Idiap
Ph.D. supervisor - james.henderson@idiap.ch	
Associate Professor Francesca Little	UCT
Head of statistics department - francesca.little@uct.ac.za	
Dr Sheetal Silal	UCT
Lecturer and mentor - sheetal.silal@uct.ac.za	
Associate Professor Tinashe Mutsvangwa	UCT
MSc. supervisor - tinashe.mutsvangwa@uct.ac.za	