

# Marcus Gawronsky

DATA ANALYST

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## Experience

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### Hubble Studios

Cape Town, South Africa

EDUCATION

August. 2018 - February 2019

- Worked as Subject Matter Expert for a data-driven course on case studies in financial risk management.
- Worked on interactive graphics for teaching the application of Machine Learning and Macroeconomic Models.

### NMRQL

Cape Town, South Africa

FINANCIAL MACHINE LEARNING

June. 2018 - July. 2018

- Started a initiative in Natural Language Processing, applying methods in data retrieval, transfer learning and dimensional reduction.

### DataProphet

Cape Town, South Africa

INDUSTRIAL MACHINE LEARNING

November. 2017 - January. 2018

- Worked in infrastructure development.
- Explored state-of-the-art techniques in anomaly detection for leading industrial company.

### Technocore

Cape Town, South Africa

CREDIT SCORING AND ADVERTISING ANALYTICS

June. 2017 - July. 2017

- Developed new presentation tools aimed at bridging business units and optimizing work-flows.
- Work on container networking as part of a long-term move to micro-services.

### KPMG

Cape Town, South Africa

IT ASSURANCE AND GOVERNANCE

November. 2016 - December. 2016

- Engaged with COBIT and ISO9000 series IT Governance Standards.
- Exposed to network security and penetration testing techniques.
- Worked in King IV compliance and IT policy drafting.

## Education

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### UCT (University of Cape Town)

Cape Town, South Africa

MASTER OF SCIENCE IN ADVANCED ANALYTICS AND DECISION SCIENCES

Jan. 2019 - Present

- Subjects include Advanced Regression, Machine Learning, Simulation and Optimization, Multivariate Statistics, Databases, Visualization and Data Science for Industry.

### UCT (University of Cape Town)

Cape Town, South Africa

BACHELOR OF BUSINESS SCIENCE IN FINANCE (WITH ECONOMICS)

Feb. 2014 - Nov. 2018

- Subjects include Statistics Honours topics in Theory of Statistics, Matrix Methods, Statistical Computing, Operations Research and Analytics.
- Awarded the Class Medal for Natural Resource Economics
- Research in the application of word-embeddings to Portfolio Risk Management

### SACS (South African College High School)

Cape Town, South Africa

NATIONAL SENIOR CERTIFICATE

Jan. 2009 - Nov. 2013

- Subjects: Mathematics, English H.L., Afrikaans F.A.L., History, Music and Physical Science
- Honours: Bachelors Pass with 6 Distinctions

CAMBRIDGE A-LEVELS

- Subjects: English Literature and Mathematics

## Honors & Awards

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2017	<b>Class Medal for Natural Resource Economics</b> Winner	UCT
2016	<b>Student Leadership Award</b> Winner	UCT
2014	<b>1st of Junior Category of the Two Oceans' Marathon Long Trail, 18th overall</b> Winner	Cape Town
2013	<b>1929 B. Baxter Memorial OBU Scholarship for all-rounded excellence</b>	SACS
2013	<b>Blues Scholarship for university studies</b>	SACS
2012	<b>Standard Bank National Schools' Big Band</b> Principal trombonist	South Africa
2010-2013	<b>Western Province Debating Colours</b>	SACS
2009	<b>Twamley Full-Bursary Scholarship</b>	SACS

## Leadership & Development

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### World University Debating Championships 2019

University of Cape Town

EXECUTIVE-DIRECTOR (CONVENER)

Nov. 2014 - Oct. 2015

- Worked with the South African and Western Cape Tourism around coordinated bid strategies.
- Coordinate planning and budget for 950 participants and R12 million.

### Students Representative Council

University of Cape Town

TREASURER-GENERAL

Nov. 2015 - PRESENT

- Rewrote the council's reporting, budgeting, control mechanisms and website.
- Involved myself in over 250 hours of consults with students with issues ranging from financial exclusion to academic readmission.
- Elected as an independent candidate with the second highest number of votes.
- Coordinated the fundraising of over R2.5 million for distressed students.

## Program & Service Committees

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2016	<b>University Finance Committee</b>	UCT
2016	<b>Undergraduate Studies Funding Committee</b>	UCT
2016	<b>University Information and Communication Technology Committee</b>	UCT
2016	<b>Information and Communication Technology User Group</b>	UCT

## Skills & Languages

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### PROGRAMMING

- Python
- R
- Visual Basic

### FRAMEWORKS

- PyTorch
- Keras/Tensorflow
- Scikit-Learn
- H2O
- Dask
- PyViz/Holoviews/Geoviews

### ACCOUNTING

- Sage Pastel Accounting

## Publications

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### CRISPRi-Seq for the Identification and Characterisation of Essential Mycobacterial Genes and Transcriptional Units

Biorxiv

CONTRIBUTOR

June 2018

- Contributed data analysis to CRISPR research, using deep variational autoencoder, GLM's and convolutional models.