CHRISTOPHER MARAIS

DATA SCIENCE
COMPUTATIONAL GENOMICS

SUMMARY

Christopher has a multidisciplinary skillset that aids in a creative approach to solving problems. He has experience working on multiple data centric projects in both individual and team environments.

EDUCATION AND EXPERIENCE

MIT Big Data Science
University of Pretoria | 2019-2020

- **Thesis**: Interspecies Gene Network Transfer Through Knowledge Graph Alignment
- **Project**: Congenital Condition Diagnostic Tool from Facial Images
- **Project**: Healthcare Workers Care Network COVID-19 Psychological Support Platform Data Consulting
- **Position**: 3rd Year Biochemistry, BScHons Statistics, and MIT Capstone Project Academic Tutor
- **Position:** Technical Assistant for the Forest Molecular Genetics Team
- **Award**: University of Pretoria Postgraduate Masters Coursework Bursary

BScHons Bioinformatics
University of Pretoria | 2018

- **Thesis**: Genome-wide SNP Genotyping for Tropical Pine Tree Species
- **Position**: High School Mathematics and Science Tutor
- **Award**: Best BScHons Bioinformatics Poster

BSc Human Genetics, Psychology and Physiology
University of Pretoria | 2014-2017

- **Certificate**: Neurosciences Visual Skills Testing and Training (*Distinction*)
- **Certificate**: Higher Exercise and Personal Training (*Distinction*)
- **Certificate**: Introduction to Neuroscience Coaching
- **Certificate**: CPR course
- **Internship**: Summer Holiday University Medical Center Groningen, Netherlands
- **Internship**: Winter Holiday University of Johannesburg
- **Internship**: Full Year Mentorship at the Centre for Excellence in Tree Health Biotechnology
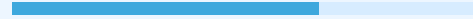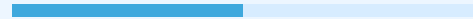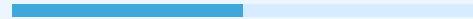- **Position**: Team Building Facilitator at Blue Naartjie Concepts
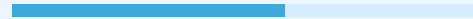
SKILLS
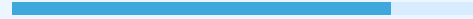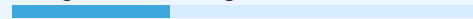
Python

R

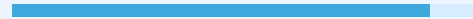High Performance Computing

SQL

Bash/Linux

Machine Learning

Data Visualization
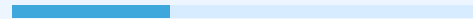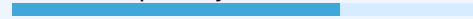
Natural Language Processing

Image Processing

JupyterLab

Visual Studio Code

Multidisciplinary Scientific Problem Solving

CONTACT DETAILS:

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✉ gcmaraissa@gmail.com

📍 Johannesburg, South Africa

OTHER EXPERIENCE

South African Sustainable Development Goal Hub
http://sasdghub.org/ | 2019-

- **Position**: Machine Learning and Artificial Intelligence Associate
- **Project**: COVID-19 Vulnerability Map Aiding South African Presidency Response Planning
- **Project**: Text Classification of Research Articles to SDGs
- **Publication**: Willem Fourie, Isak van der Walt, Hannes Strydom & Christopher Marais "**South African System Tracks SDG Research**" in Nature Correspondence, vol. 573, p. 196, 2019.

SynthEthics
https://www.synthethics-bio.com/ | 2020-

- **Position**: South African Representative

LANGUAGES

English

Afrikaans

German (B2 Level)

Dutch

REFERENCES

Prof Zander Myburg
Chair of Forest Genomics & Biotechnology & Head of the Forest Molecular Genetics Research Group

Prof Fourie Joubert
Associate Professor in Bioinformatics and Genomics at the University of Pretoria

Prof Willem Fourie
Associate Professor in Social Ethics at the University of Pretoria

Dr Vukosi Marivate
ABSA Chair of Data Science & Senior Lecturer of Computer Science at the University of Pretoria

Dr Raphael Ployet
Postdoctoral Fellow at the Forest Molecular Genetics Research Group

Dr Nanette Christie
Postdoctoral Fellow at the Forest Molecular Genetics Research Group

[Certificates and confidential referee contact details on request]