



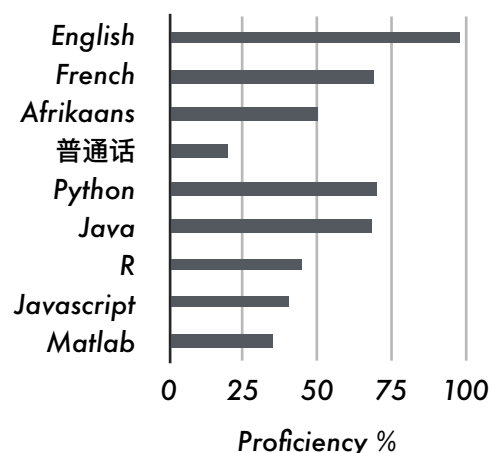
now	Honours in Applied Mathematics
2019	Graduated
	UC Berkeley (6 month exchange)
2017	University of Cape Town
2016	Matriculated

I am someone with both analytical and artistic aptitude, curious about the intersection between these fields. I am pursuing an honours degree in Applied Mathematics, exploring topics such as the interpretability of machine learning, data visualisation techniques, and modeling stochastic processes.

Aside from visual communication, I like to articulate myself through various languages, and sounds. I am a classical guitarist, and amateur composer.

When not studying or working, I can be found cooking, climbing or surfing.

### Mastery of Languages



### Achievements

- NRF Bursary for Honours 2020
- Graduated with Distinction - (BSc Computer Science and Applied Mathematics) 2020
- Selected for exchange to UC Berkeley 2018
- Dean's merit list 2017, -18, -19
- Chinese class medal 2018
- Science faculty scholarship 2017, -18, -19
- Top 5% of learners in 6 or more subjects for NSC (IEB) 2016
- Award for outstanding service to the Johannesburg Junior Council 2016
- Grade 8 guitar with distinction 2016

### Skills

- Machine learning using Python and TensorFlow 2
- Object-oriented programming in Java
- Web application development
- Numerical methods in Matlab
- Version control with Git
- Typsetting with LaTeX
- Code 10 driver's license
- Composition and music production with Ableton Live
- Sketching, painting, animation, photography

### University of Cape Town (BSc) Marks

Key: course code mark Example: (MAM)1000 82(%)

Year	Mathematics (MAM)	Computer Science (CSC)	Other
2019	3040 81	3003 80	STA2007 (Statistics) 85
		3002 79	STA1000 (Statistics) 94
2018	2047 86	2002 73	MUZ2239 (Guitar) 75
		2004 79	INF2009 (System analysis & design) 75
2017	1000 82	1016 87	SLL1122 (Chinese) 90
		1044 100	SLL1121 (Chinese) 89
2016	1042 81		MUZ1239 (Guitar) 84

2012 St. John's College

2008 Belgium (3 months)

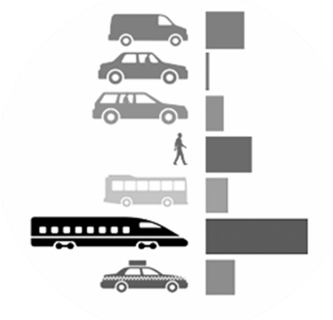
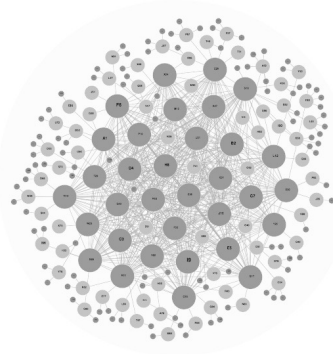
2005 Emmarentia Primary

2002 Switzerland (3 months)

1998 Born Johannesburg

## Select Graphics

## Work Experience



### Intern at the Gauteng City Region Observatory

2019

Many people have to make the difficult decision to live away from their families. Using regression analysis, I explored how income, sex, population group and other factors impact the proportion of a person's dependents that live with them.

2018

Feeder zone policies impact the quality of education a student can have access to. As my first time working at GCRO, I had to first come to terms with working with a big dataset. I then created visualisations of the implications of changes to feeder zone policies.

### Tutor for Computer Science, Mathematics and Statistics

2019 - present

I am university employed tutor and have tutored the 2nd and 3rd year Computer Science courses, the multivariable calculus course and the introductory Statistics course. Through tutoring I have been made more aware of the uneven backgrounds that students at the university have. This experience has also helped me revise my own knowledge, and have it explored from new perspectives.

### Head chef in a Berkeley Co-operative

2018

During my exchange I was fortunate enough to experience co-operative living. My role was as a head chef, working with three other sous-chefs to set and create predominantly vegetarian meals for over 50 people. This made me aware of the pressures of cooking at scale, gave me experience in using sustainable produce, and helped me develop the skills necessary to inspire a team. Culinary highlights include butternut ravioli, tacos, biryani and malva pudding.

### Created and applied stencils for the RCVA SA tour

2015

In 2015, the RVCA skate team toured South Africa. For the Johannesburg leg of the tour, I created portraits of prominent hip-hop artists and developed a modular stencil system to create large-scale lettering. The portraits were applied to ramps in a pop-up skatepark in Maboneng and a large banner was created with the words, "Welcome RVCA USA". This was my first paid job.

## References

GCRO  
Dr Alexandra Parker  
[alexandra.parker@gcro.ac.za](mailto:alexandra.parker@gcro.ac.za)

Applied Mathematics  
Dr Christian Rohwer  
[christian.rohwer@uct.ac.za](mailto:christian.rohwer@uct.ac.za)

## Matric NSC final marks (IEB)

Afrikaans First Additional Language	86
English Home Language	92
French Second Additional Language	95
Life Orientation	85
Mathematics	98
Music	92
Physical Sciences	92
Advanced Programme English	81

## SAT Scores (2017)

SAT	Reading & Writing	780
	Math	790
	Overall	1570
Subject tests	Physics	790
	Mathematics	800