

MICHAEL VAN NIEKERK

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EDUCATION

Masters in Data, Economics & Development Policy (Economics) , <i>Massachusetts Institute of Technology (MIT)</i>	2022
<i>Econometrics, Political Economy, Machine Learning & AI, Microeconomics, Data Science</i>	
Bachelor of Science (Economics) , <i>University of Cape Town (UCT)</i>	2018
<i>Advanced Micro & Macro, Econometrics, Labour Economics</i>	
TESOL Qualification , <i>University of Witwatersrand Language School (WITS)</i>	2016
Bachelor of Science (Mathematics & Physics) , <i>University of Cape Town (UCT)</i>	2015
<i>Real Analysis, Linear Algebra, Advanced Calculus, Metric Space, Differential Equations, Numerical Methods, Computer Science</i>	

WORK EXPERIENCE

LUMKANI	2022 — YTD
<i>Senior Software Developer</i>	<i>Cape Town, South Africa</i>
<ul style="list-style-type: none">Implemented various improvements across frontend JS/Quasar Website & App and backend MySQL/DjangoDesigned and implemented an SFTP integration to give our customers access to a rewards programTransformed our ETL system into a deployable, infrastructure-as-code repository with a QA environment	
EVIDENCE FOR POLICY DESIGN AT HARVARD KENNEDY SCHOOL	2022
<i>Research Intern</i>	<i>Cambridge, Massachusetts</i>
<ul style="list-style-type: none">Wrote a Python CLI tool to automate repetitive, daily high frequency checks on survey responsesDesigned and executed a migration plan to version control all existing code in GithubAnalysed targeting of the Indonesian government's fuel subsidy policy using Stata	
AMAZON WEB SERVICES	2020 — 2021
<i>Software Developer</i>	<i>Cape Town, South Africa</i>
<ul style="list-style-type: none">Automated (with the team) the migration of ~ 3000 databases from MySQL 5.5 to MySQL 5.7 without downtimeImproved the success rate of our automated database life-cycle management (Python, Ruby, Bash)Audited and subsequently fixed a high severity replication risk that previously caused data inconsistenciesCredited with ownership of high severity risk which lead to a promotion within 1st year	
ACTION APPOINTMENTS	2020 — 2022
<i>Software Developer</i>	<i>Cape Town, South Africa</i>
<ul style="list-style-type: none">Rewrote the back & front end recruitment management system in Django, MySQL, and ReactProvisioned and configured Azure cloud resources (with CD) to host the new systemMigrated all customer and client data from on-premise server to Azure and Microsoft 365 to ensure 24/7 access	
ELECTRUM PAYMENTS	2018 — 2020
<i>Software Developer</i>	<i>Cape Town, South Africa</i>
<ul style="list-style-type: none">Popularised a RESTful testing framework and paradigm to improve reliability of production codeEnhanced a banking client's mobile payments service to add new features for over 10 million usersRedesigned a banking client's user authentication system to a new, robust RESTful Java backend with a MySQL datastoreDesigned and built a new product in Java to allow clients to automate payment reconciliation and settlement	
THETHANI DEBATING LEAGUE	2014 — 2015
<i>Training Director</i>	<i>Cape Town, South Africa</i>
<ul style="list-style-type: none">Facilitated weekly debate sessions and monthly tournaments for over 400 students in under-privileged schools across Cape TownDesigned a coaching manual and trained volunteers on how to coach debating effectively	

CORE SKILLS

Software	Python, Javascript, Java, Ruby, SQL, R, Bash scripting, Stata, Git, Docker
Knowledge Systems	Databases, data processing, modelling, econometric analysis
Communication	Public speaking, critical thinking, facilitating workshops, delivering presentations, debate
Languages	English, isiZulu, isiXhosa

AWARDS

Hewlett Foundation scholarship recipient to study at MIT	2022
South African and Southern African debating finalist	2014-2015
Dean's Merit List at University of Cape Town	2013 — 2015