

Ken Kaittany

DATA SCIENTIST AND DATA ENGINEER

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Quote from Voltaire: “**No problem can withstand the assault of sustained thinking!**”

Education

University of Johannesburg

Johannesburg, Rep. of South Africa

M.Sc. IN DIGITAL ANALYTICS

2022 - 2023 (Expected)

- Research focus: Machine Learning and Optimization in Digital Marketing

University of Pretoria

Pretoria, Rep. of South Africa

B.Sc. (HONS) MATHEMATICS OF FINANCE AND FINANCIAL ENGINEERING

2009 - 2012

- Dissertation: Pricing of various American Options with the Longstaff-Schwartz method

University of Pretoria

Pretoria, Rep. of South Africa

B.Sc. (HONS) APPLIED MATHEMATICS

2009 - 2012

- Dissertation: The Hamilton approach in describing the longitudinal vibrations of an isotropic stepped rod under specified conditions

University of Pretoria

Pretoria, Rep. of South Africa

B.ENG. MECHANICAL ENGINEERING (MAJOR) AND B.Sc. APPLIED MATHEMATICS (MINOR)

2004 - 2009

Technical Skills and Aptitudes

Operating Systems

Windows and Linux

Programming Languages / Tools

C#, Python, SQL (Microsoft SQL Server, PostgreSQL, MySQL, Google Legacy, and Google Standard), R, R-Shiny, M-Language, DAX, MATLAB, Lingo, JavaScript, HTML, CSS, YAML

Application Platforms

Google Cloud Platform tools (Identity and Access Management; Bigquery; Cloud Storage; Cloud Functions; Cloud Composer, fully managed service built on Apache Airflow; App, Compute, and Kubernetes Engines; AI Platform; Dataprep; Publish/Subscribe (Pub/Sub) messaging; Logging, and Monitoring; Tensor Flow), Microsoft tools (Visual Studio, Visual Studio Code, SQL Server Management Studio, Azure SQL Database, Azure Machine Learning Studio, Azure Synapse Analytics, Azure DevOps, Azure Analysis Services, Azure Databricks, Azure Blob Storage), R-Studio, MATLAB, LINGO, PGAdmin, Octopus Deploy, Hashicorp Terraform, Grafana Labs, Atlassian Opsgenie, IBM ILOG CPLEX Optimization Studio (Scheduling and Combinatorial Optimization routines), Facebook Ads Manager Google Marketing Platform products (Google Analytics, Google Adwords, Campaign Manager 360, Display & Video 360, Tag Manager, Optimize, Data Studio)

spoken languages

English
Kiswahili

Experience

OUTsurance Holdings Ltd.

Johannesburg, Rep. of South Africa

BUSINESS INTELLIGENCE SPECIALIST: DATA WAREHOUSING AND ENGINEERING

June 2020 - Current

- Client-centric data modelling for standardization purposes via semantic layering across the entire Actuarial department. Models are deployed to the cloud via Azure ecosystem to facilitate data processing speeds and perform machine learning routines.
- Employing a star-schema approach to modelling critical business measures such as quotes and sales for the entire Actuarial department.
- D.A.G and App development using various platforms such as Apache Airflow and Visual Studio respectively to create ETL pipelines that connect different external data sources to internal warehousing in order to facilitate analysis and reporting.
- Monitoring and reporting the state of ETL processes used by the Actuarial and Business Intelligence departments.

OUTsurance Holdings Ltd.

Johannesburg, Rep. of South Africa

DIGITAL MARKETING DATA SCIENTIST

June 2017 - May 2020

- In charge of assimilating, structuring and reporting on the digital foot print of all prospective and existing clients that engage with the company via various online platforms and media devices.
- In charge of attribution modelling through data mining of customer journeys with a key focus on improving customer experience by gathering insights from various digital marketing funnels.
- In charge of conveying online advertisement performances to the creative team in a bid to drive more customers through various digital marketing funnels and hence, improve on customer acquisition.
- In charge of automating the creation of audiences according to customers' online behavioural trends (user-centred design) using supervised and unsupervised machine learning techniques such as regression modelling and clustering respectively. This in turn will dictate the most suitable types of advertisements and products that should be channelled to each customer class.
- In charge of internal data warehouse keeping and reporting on online performance metrics such as leads, quotes, sales and policy cancellations.

OPSI Systems

Johannesburg, Rep. of South Africa

MATHEMATICAL MODELLING, OPTIMIZATION AND QUALITATIVE DATA SPECIALIST

April 2014 - May 2017

- Created and currently maintaining a vehicle logistics auditing tool for internal and external implementers which provides two main functionalities: establishing possible client data setup irregularities by employing various data mining techniques and proposing recommended values of certain statistical categories provided by robust optimization routines. The tool is fully automated and web-accessible.
- Project lead and developer of an optimization tool that provides the best configuration settings for the company's vehicle routing software applications which provide the best tailor-made scheduling solutions for different clients.
- Periodically perform regression analysis based on scheduler performances of different EXE versions of various optimization products sold to clients.
- Provided consulting services to banking institutions such as Standard Bank on establishing the best locations for possible ATM placements through geocoding optimization routines which will optimally serve their expanding client base across the country.
- Part of the development team that solved complex rail operational issues for Transnet Freight Rail, specifically on their coal line scheduling distribution sector.

University Of Pretoria

Pretoria, Rep. of South Africa

OPERATIONS RESEARCHER AND ASSISTANT LECTURER

July 2009 - December 2013

- Worked in the civil engineering department in developing and performing optimization routines on various transport network models.
- Appointed as an assistant lecturer in the fields of Mechanics and Physics and main duties included: research on teaching material and methodology; and structuring and conducting of tutorial sessions.

SENET

Johannesburg, Rep. of South Africa

VOCATIONAL COMPUTER AIDED DESIGNER

December 2006 - December 2011

- Performed extensive research on new-cutting edge technologies for purposes of modification and implementation.
- Created detailed designs and assembly of new variable speed-drive mechanisms.
- Tasked with Computer-Aided Design (CAD) modelling of steel structures

Awards and Extracurricular Activities

Golden-Key Association of Top Achievers

Pretoria, Rep. of South Africa

CORE STUDENT

December 2004 - December 2009

- I was among the top 15% of students from all faculties of the University of Pretoria, thus awarded membership into the Golden-Key Association for Top achievers.

Saint Mary's International Baccalaureate

CORE STUDENT

January 2000 - December 2002

- Lead a team of colleagues to provided remedial lessons in Science and Mathematics to primary school candidates based in rural regions.
- Visited Home-care centers for children inflicted with AIDS and Cancer. I lead a team of colleagues in tasks such as administration of medicine and general cleaning. As a team, we also organized, managed and participated in indoor activities with the children. More importantly, we offered encouragement and advice on how to live rich fulfilling lives despite their condition.
- Visited Homes for old-aged people. Other than interacting with the inmates, I lead a team of colleagues in staging plays and other forms of entertainment.
- I was part of the school's basketball team that advanced to the semi-finals in the National-league.

Consolata High School

CORE STUDENT

January 1997 - December 2000

- Best student, Class of 1997, 1998, 1999 and 2000. Received numerous merit and bursary awards.
- Deputy head-prefect and house representative.
- Part of the school's basketball team that competed with other high schools nationwide.
- The school's table-tennis champion.