

# MWANGE CARLVIN JERRY

I am a BSc. Financial Engineering graduate with a specialization in quantitative analysis and data science. I am a quick learner, open minded and curious to engage in new ideas with challenges and efficient problem-solving tasks. I enjoy working environments that push my skills to the limit, motivated by quality results. I am cooperative, I have good problem solving skills, a team player, eager to learn and good at taking direction. Excellent verbal and communication skills as well as interpersonal skills.



## EDUCATION

2017  
|  
2013

### B.S., Financial Engineering

Jomo Kenyatta University Of Agriculture And Technology

Nairobi, KE

- **Research Project:** Comparison between constructing an options hedge and a hedge on futures for market risk mitigation.
- **Key Units:** Probability & Statistics, Risk Theory for Financial Investments, Statistical Programming for Finance (R, Python)



## INDUSTRY EXPERIENCE

Current  
|  
2017

### Quantitative Analyst

Innova Limited

Nairobi, KE

- Research and implementation of financial markets analysis models
- Building, developing and testing financial models used to analyze financial investments data in different markets across Africa (6 countries) - These models aid in better decision making for said fund managers and investors alike.
- Research and implementation of machine learning techniques in the financial markets domain.
- Implemented Machine Learning techniques for predictive modelling on financial time series data. Work primarily done in **R, Python, Julia** and **F#(Nuget Packages)** for the **.Net framework** integration.

2016  
|  
2016

### Mathematical Engineering Intern

Innova Limited

Nairobi, KE

- Performed analytical research in data manipulation and visualization.
- Research in financial modeling techniques and implementation in R language for statistical programming.
- Built internal tool to help the company store, analyse and visualize Uber usage transactions for its employees.
- Predictive modelling research. Work primarily done in **R, SQL** and **Microsoft Azure platform**.
- Developed dashboards and reports for system processes monitoring- Work mainly done in **R Shiny, Tableau, Microsoft Power BI**.

## CONTACT INFO



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**Carlvin || Beyond Raw Data**

For more information, kindly contact me via email.



## SKILLS

**F#** - Functional programming

**Julia** - Numerical Computing

**Power BI / Tableau**

**Python** - Data Analysis & ML

**R(tidyverse, Shiny)** - Data Analysis & ML

**SQL** - DBMS

I have worked in a variety of roles mainly revolving research & development in data analytics. I like collaborative environments where I can learn from my peers. Capable of working well both individually as well as in teams with minimum or no supervision and follow through assignments.



## SELECTED DATA SCIENCE WRITING

Current  
|  
2019

- **Personal blog articles based on data science research topics and practices**  
[Beyond Raw Data Blog](#)
  - This is my personal blog where I get to showcase some of my projects and research findings in data science.

2019  
|  
2019

- **Digital Nudging, using Twitter data to solve a nudge case scenario**  
[Beyond Raw Data Blog](#)
  - A case study and write up on the resulting solution I came up with during a hackathon hosted by Safaricom PLC on applying nudge theory to extract information from social media users online.
  - Coded in R and Python.

Being an avid data analyst, I challenge myself often to tackle different data analysis & visualization problems. Findings from these challenges are documented on my personal blog.



## SELECTED PROJECTS

- **My Data Science projects**  
[Projects](#)
  - Documentation of personal projects and findings on data analysis, visualization and machine learning.
  - Work primarily done in R Shiny, Python, F# and Microsoft Azure.



## HONORS & AWARDS

Current  
|  
2019

- **The Capital Markets Authority Regulatory Sandbox**  
[CMA Regulatory Sandbox](#)
  - Participation in developing a cloud based platform for financial markets data analysis and reporting. The CMA and RBA expect quarterly reports from every registered fund manager for regulatory purposes, the analytics system automates generation of these reports by enabling the regulatory bodies to seamlessly access required data without collecting manually generated reports from fund managers. This mitigates possible discrepancies that may arise due to human error or negligence during manual generation of the said reports.
  - Product of Innova Limited

2019  
|  
2019

- **Data Science hakathon by Safaricom Alpha**  
Strathmore University  Nairobi, KE
  - Finalist, Digital Nudging on Twitter data competition

2019  
|  
2019

- **Microsoft Azure Machine Learning Certificate**  
[LGIT Smart Solutions](#)
  - Certificate of completion of the Microsoft Azure Machine Learning course.
  - Work done in Microsoft Azure and Python



## REFEREES

George Mbuthia Ndungu,  
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