

# Nabeel Vandayar

Data and machine learning engineer | Biomedical and electrical engineer | Biomechatronic robotics enthusiast  
Johannesburg Area, South Africa

## Summary

I design, implement and manage data pipelines for real-time and scheduled bulk data processing using Python, AWS Redshift and EMR, Azure Databricks and CosmosDB, Apache Airflow, Spark and Kafka, using relational and NoSQL distributed databases. I also build and deploy machine learning models as scalable web services using Tensorflow, Docker, Kubernetes. My research "Hand gesture recognition on low cost hardware" has been published by the IEEE and the Pattern Recognition Association of South Africa. I have degrees in biomedical and electrical engineering and enjoy designing and building electromechanical systems using AI, robotics and the web.

## Experience

Altron Data Engineer November 2018 - Present (1 year 5 months)

South Africa Data pipeline design | Data modeling | User analytics | Software development | Machine learning solutions  
| Algorithm development | Big data processing | Real time solutions

MediSwitch, a Division of Altron TMT (Pty) Ltd Data Scientist January 2017 - July 2018 (1 year 7 months)

South Africa Diabetes diagnosis prediction using neural networks | Customer data visualization | Medical data processing | Principal component analysis.

## Certifications

Sequence Models Neural Networks and Deep Learning Convolutional Neural Networks Data Engineering Nanodegree  
Cloud Native Development with Node.js, Docker, and Kubernetes

## Honors-

Awards University Entrance Scholarship Dean's Merit List: Bachelor of Medicine and Bachelor of Surgery Year 1  
Electronics Merit Award Software Development Merit Award Dean's List

## Education

University of the Witwatersrand

Master of Science (MSc) in Engineering, Biomedical Engineering · (2019 - 2020)

University of the Witwatersrand Bachelor of Science (BSc) in Engineering , Electrical and Information · (2017 - 2018)

University of the Witwatersrand Bachelor of Engineering Science (BEng), Biomedical Engineering · (2014 - 2017)

University of the Witwatersrand Bachelor of Medicine, Bachelor of Surgery - MBBCh (Deferred), Medicine · (2013 - 2013)

Jeppe High School for Boys Matric · (2008 - 2012)