

# Tshilidzi Mudau

C#, Java & Python Programmer.

## Contact

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## Personal Details

Gender: Male

Age: 24

ID: 901019 5768 080

## Programming Languages

C#, Python, Java

## Software

Visual Studio,  
Netbeans, CodeBlocks,  
PyCharm

## Education

2014–Present Masters of Science

University of Johannesburg

### [Training neural networks given missing/incomplete data.](#)

The objective of this thesis is to investigate and develop a neural network model, through which, neural networks can successfully be trained in the event that it is supplied with either incomplete/missing data. I have devised a new neural network model, through which the neural network can indeed be trained successfully in such an event. The model doesn't involve any additional data pre-processing other than that which the scientist/programmer would normally do. The results of the model are better than most of the other methodologies popularly used.

2014–2014 BSc Honours Computer Science

University of Johannesburg

Coursework: Artificial Intelligence, Advanced Artificial Intelligence, Systems Programming, Data Communications, Computer Graphics, Honours Project, Information Security, Legal And Ethics.

2010–2013 BSc Mathematics And Computer Science

University of Johannesburg

Coursework: C++ Object Oriented Programing, Java Network Programming, Advanced Data Structures, Operating Systems, Differential Calculus, Advanced Calculus, Linear Algebra, Static And Dynamics, Differential Equations, Discrete Mathematics, Abstract Algebra, Real Analysis, Complex Analysis.

2008 Grade 12

Noordgesig secondary school

Subjects taken: English first language, Afrikaans first additional language, Mathematics, Physical sciences, Life science, Geography, Life orientation.

## Experience

### Software Developer

January 2016 – present

Tracker South Africa

I work on developing backend services, mostly REST APIs. This are critical services contains amongst other things valuable customers details and financial information and are used on a daily basis by front end applications. All this services are written purely in C#.

### Software Developer

January 2015 – December 2015

Newsclip Media Monitoring

I worked as part of a team that developed in-house software for the company. Over the cause of this time period, I individually developed two systems (a scanning system for automating the scanning of publications and an advert processing system) and worked in several others systems as part of the team. This systems were and are still used on a daily basis by a team of at least 15 people who process publications. I developed in C# as well as WPF.

2012–2013 Computer Science and Informatics Tutor University of Johannesburg  
Assist computer science undergraduate students with their practical assignment. The job involved the marking of student assignment as well as physically assisting students with their projects during the practical programming sessions.

## Personal Projects

2014 [Identikit Generation System](#) University of Johannesburg  
Witnesses to crime are often required to give a detailed description of the perpetrator of the crime. Unfortunately, this is a very inefficient procedure. This system creates 3D identikits from the witness's vague mental memory by using genetic algorithms.

2014 Warehouse Management system University Of Johannesburg  
A virtual warehouse managed by a swarm of intelligent agents. This system minimizes the time it takes to process orders in the warehouse. All this is achieved by using a constraint graph together with neural networks.

2014 Linux Kernel Compression Device University Of Johannesburg  
This Linux kernel base compression device reduced file compression time by up to twelve percent. Huffman encoding was used as the compression algorithm. To make the device more efficient, it also supports ioctl, procfs and sysfs.

## References

- Dr D.A Coulter: Masters & Honours Supervisor And Lecture. [dcoulter@uj.ac.za](mailto:dcoulter@uj.ac.za)  
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