

# KENNEDY | CHENGETA



» I love machine learning, deep learning, computer vision and workflow bpmn/bpel based software development using camunda/springboot

## Summary

I am a workflow and machine learning expert with experience in educational research as well as in the private sector. I have worked with BPEL/BPMN workflow technologies like BAW, Cloudpak for Automation, IBM BPM, IBM API Connect, Python based Tensorflow and Keras, Flutter Mobile Development and React as well as Angular.JS frameworks for java development. I have done work with deep learning frameworks like RNN, GANS, Image Segmentation, Reinforcement Learning, Supervised Learning as well as unsupervised learning. I am a computer vision expert in image processing techniques with deep learning.

***I am a Certified Java Developer, IBM BPM Developer, Salesforce Flow/Python /Camunda/SpringBoot Developer***

» **Status:** Fullstack JS Engineer, Computer Vision, BPM

» **Tech:** Augumented Reality, Javascript, python, java

## 1. Completed Education

2016 / 00 - University of KwaZulu Natal

### Phd Computer Science (AI/Computer Vision)

- » Computer Vision, Machine Learning
- » Image Processing, Facial Emotion Detection

2013 - 2015 - University of Leicester, UK

### Msc Advanced Software Engineering

- » DSL,Semantic Web, SOA
- » PLSA Unsupervised Machine Learning

2004 - 2007 - University of NUST

### Msc Finance and Investments

- » Corporate Finance, Investment Analysis
- » Financial Mathematics, Financial Modelling

1999-2001,2011-12 - Universities of Zimbabwe and Pretoria (UP)

### BBS Computer Science, MSc in Information Technology

- » BBSCT-Computer Science and Finance
- » 13 IT Management courses completed, thesis incomplete

- Current-WITS University

### Phd in Applied Mathematics

- » Monte Carlo
- » Financial Mathematics with Machine Learning

Current - nstitute of Technology Sligo,Ireland

### Post-Graduate Diploma in Autonomous Vehicles

- » Self Driving Cars
- » Autonomous Vehicles with Machine Learning

Current - UCT/Sheffield University

### MSc Engineering in Telecommunications/Msc in Statistics and Financial Mathematics

- » Signal Processing, Digital Communications
- » Next Generation Wireless 5G/6G/Monte Carlo

## 2. Experience

2012 now - Standard Bank of South Africa

### IBM BPM Process/Fullstack Javascript Engineer

- » Process Mining, javascript, angular js and React
- » IBM BPM 8.6; 8.5.7; 8.5.6; 8.5.5; 8.0.1 development and design.Straight Through, BPMN and BPEL as well Case Management Framework, Camunda/SpringBoot

2012 - now - KaribuTechs AI (Founder)

### Machine Learning/Computer Vision

- » Deep Learning, Image Processing, Augumented Reality, Facial Recognition, Reinforcement Learning
- » Tensorflow Development and MuleSoft Development

2010 - 2012 - Ubank SA

### Websphere MQ/Linux/Websphere Analyst

- » pSeries, Linux Admin
- » Java Development, Shell Programming, AIX

2008 - 2010 - Vodacom SA

### Workflow/Intergration Engineer

- » Process Server Development and Portal Development using IBM BPM Portal,Liferay as well as Oracle Fusion.
- » Developing SOA Solutions for Liferay and Websphere

2005 / 08 - ZB Life Assurance

### Java EE Architect

- » Life Insurance System (Premium, New Business, Claims)
- » Java ,websphere and lotus development

2001 - 2003 - ExxonMobil Zimbabwe

### GIS Systems Analyst

- » Network Support, Lotus Notes,Accpac. ERP
- » Accpac Accounting Systems Support specialist.

## »» 4. Post Doctorate Research

2021 now - KaribuTechs AI

### Post Doctorate Researcher: Image Segmentation

- » Liver Tumor Segmentation Using Machine Learning Techniques..
- » Various techniques such as a multilayer CNN, or a CNN-RNN model will be tested to improve the classification accuracies against the state-of-the-art. Investigation. Deep learning techniques such as EfficientNet are proposed towards accurate liver tumor segmentation.

2021 - now - KaribuTechs AI

### Graph Neural Networks and Optimization

- » Graph Neural Networks algorithms in computer vision.
- » Optimisation of deep learning relu based variant activation functions using mushroom image data (IEEE, ICTAS)

2021 - 2021 - KaribuTechs AI

### Quantum Computing

- » Generate image to image translation with GANs with photo-realistic images to sketches
- » Quantum Machine Learning application in computer vision

2021 - now - KaribuTechs AI

### Robotics Optimization

- » Mobile Robots discusses the hardware and software architectures used to build mobile robot systems.
- » Intelligent Mobile Robots covers sensing, representing, modelling of the environment, adaptive behaviour and social behaviour of robots.. Robotic Control Principles

2016 - 2018 - KaribuTechs AI

### Natural Language Processing

- » Natural Language Processing and Voice detection)
- » Hidden Markov Models and Amazon AI

2021 - 2021 - KaribuTechs AI

### Image processing with Salesforce Einstein AI Engine

- » Low to High Super-Resolution Convolutional Neural Network for Image Restoration
- » Tensorflow.js application for image processing on mobile platforms with android

2021 - 2021 - KaribuTechs AI

### Process Mining with IBM BPM

- » Process Mining BPM Data
- » Workflow related elastic search

### Academic Conferences Reviewer

- » Big Data Conference -Mauritius University/UKZN SA
- » ICTAS Durban University of Technology

## »» 5. Recent Top Industrial Projects

2018 2021 - Standard Bank of South Africa

### Hybrid Facial Recognition Workflow System

- » Account Onboarding with Facial Recognition workflow
- » IBM BPM 8.6; 8.5.7; 8.5.6; 8.5.5; 8.0.1 development and design. Straight Through, BPMN and BPEL as well Case Management Framework, Camunda/SpringBoot

2021 now - Standard Bank of South Africa

### DigiSigning Workflow System

- » DigiSigning with LawTrust Signatures workflow
- » IBM BPM, OCR, WhatsApp document approvals

2012 - now - KaribuTechs AI (Founder)

### Hybrid Camunda Based SpringBoot Insurance Workflow

- » Deep Learning, Image Processing, Augmented Reality, Facial Recognition, Reinforcement Learning
- » Tensorflow Development and MuleSoft Development

2010 - 2012 - Ubank

### MQ Installation and Setup and Management

- » pSeries, Linux Admin
- » MQ Setup and Installation

2018 - 2020 - Standard Bank Airports ACSA

### BPM Setup, Migration and Installation

- » Process Server Development and Portal Development using IBM BPM Portal, Liferay as well as Oracle Fusion.
- » Migration, installation IBM BPM/DB2/AIX/zLinux

2005 / 08 - ZB Life Assurance

### Life Insurance System

- » Life Insurance System (Premium, New Business, Claims)
- » Java, websphere and lotus development

2020 - 2021 - Standard Bank SA

### Salesforce Backed eCommerce Account Origination

- » Salesforce Flow, IBM BPM BPEL and BPMN workflow
- » IBM API Connect

## »» 6. Certifications

### Programming and Network Certifications

- » Java Certified Programmer, SAFE Agile Certified, Certified CISCO Network Course
- » IBM Certified Integration Developer, Websphere MQ Certified Programmer, Togaf Certified Architect, Certified Websphere Webservices Developer, BPM Certified DB2 Developer V8.0, Certified CLP Lotus Notes and Domino