Kennedy Chengeta (Ph. D.) · Consultant Software Engineer · Pretoria, South Africa · **kennedychengeta@gmail.com** · +27 826769306

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 also an experienced computer vision expert in image processing techniques with deep learning and traditional approaches.

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

- **Tech:** Augumented Reality, Javascript, Bootstrap, TensorFlow, Keras, python, java and Matlab, Camunda, SpringBoot, React, Flutter, Angular JS
- **Loves:** Formulae One Racing, Sci-Fi series, Stackoverflow, Cricket, Arsenal and Messi

- **Status:** Fullstack JS Engineer, Computer Vision, BPM Process Consultant
- **Fields:** BPM Workflow Management, Java Development, Machine Learning, Computer Vision, Consulting

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 and Computer Science, Masters in IT

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

3. Current Education

2021 - 2022 - Institute of Technology Sligo,Ireland
Post-Graduate Diploma in Autonomous Vehicles

- Self Driving Cars
- Autonomous Vehicles with Machine Learning

2021 - 2022 - University of Cape Town
MSc Engineering in Telecommunications

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

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
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.

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4. Post Doctorate Research

2021 now - KaribuTechs AI
Post Doctorate Researcher: Image Segmentation

- Liver Tumor Segmentation Using Machine Learning Techniques.. In this project, we are developing automatic segmentation algorithms based on machine learning to segment liver lesions in contrast-enhanced abdominal CT scans. There is a bench-mark dataset which available from the MICCAI. And the main objective of this work is to detect the liver cancer accurately using automated methods.
- Various techniques such as a multilayer CNN, or a CNN-RNN model will be tested to improve the classification accuracies against the stat-of-the-art.Investigation The methodology includes Deep learning techniques such as EfficientNet are proposed to be implemented and enhanced towards accurate liver tumor segmentation.

2021 - now - KaribuTechs AI
Graph Neural Networks and Optimization

- Graph Neural Networks algorithms in computer vision. (IEEE,ICTAS) with Elizabeth Mabika (NUST)
- 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 emotion 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

5. Recent Top Industrial Projects

2018 2021 - Standard Bank of South Africa
Hybrid Facial Recogniton 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, Augumented Reality, Facial Recognition, Reinforcement Learning
- Tensorflow Development and MuleSoft Development

2021 - 2021 - TransUnion
MQ Installation and Setup and Management

- pSeries, Linux Admin
- MQ Setup and Installation

2018 - 2020 - Airports ACSA
BPM Setup and Installation

- 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
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