

Julien Nyambal

Education

- 2019 - **PhD in Computer Science (Machine Learning)**. Supervisors: **Dr. Richard Klein & Prof. Turgay Celik**, *University of the Witwatersrand, Johannesburg, South Africa*.
- 2017 - 2018 **Master of Science in Computer Science (Machine Learning - Computer Vision)**, Supervisor: **Dr. Richard Klein**, *University of the Witwatersrand, Johannesburg, South Africa*.
- 2016 **Bachelor of Science (Honours) in Computer Science**, *University of the Witwatersrand*, Passed with Distinction, *Johannesburg, South Africa*.
- 2012 - 2014 **Bachelor of Science in Computer Science & Mathematics**, *University of Zululand, Kwadlangezwa, South Africa*.

Professional Experience

- 12/2019 – **Software Engineer, Data Scientist**, *Entelect, Johannesburg, South Africa*.
- Present
- **Standard Bank: Forex Customer Analysis**: Using time series to understand trends around the user behaviour with regards to the Forex changes between the Rand (ZAR), the US Dollar (USD) and the Nigerian Naira (NGN)
 - **Standard Bank: Internal Incident Reporting System RMP**: Adding the GraphDB feature to the system, and helping with creating a data flow between the data lake and the graphDB.
- 02/2019 – **Part Time Lecturer**, *University of the Witwatersrand, Johannesburg, South Africa*.
- Present
- Introduction to Programming and Algorithms, COMS 1022A
 - Introduction to Data Structures And Algorithms COMS 1017A
- 04/2018 – **Software Developer, Data Scientist**, *Retro Rabbit, Johannesburg, South Africa*.
- 12/2019
- **Kalido**: My role was to write python scripts to enhance the current machine learning model responsible for matching two requests that were english user sentences. The management of all the requests were handled using Spark mostly. I implemented the autoscaling infrastructure using AWS ECS and leaving the images in AWS ECR. That was to increase the faster ingestion of the request in production.
 - **Nedbank Market Edge 3.0**: I am currently in the data team and responsible for data analysis and data modeling. I deal with millions of transactional data that will help me to create user personas based on their spending habit using some machine learning algorithms like clustering.
- 06/2017 – **Teaching Assistant**, *University of Witwatersrand, Johannesburg, South Africa*.
- 04/2018
- Marking assignments, tests, invigilations, tutoring, monitoring laboratory work
- 02/2013 – **Teaching Assistant**, *University of Zululand, Kwadlangezwa, South Africa*.
- 11/2014
- Marking assignments, tutoring, monitoring laboratory work

Skills

- Languages Python(fluent), SQL, Golang (intermediate), Java, Scala(basic), C++(basic), L^AT_EX, Shell/Bash (intermediate)
- Frameworks Keras, Tensorflow, Git, PowerBI, Neo4J
- OS Ubuntu Linux(Preferred), Windows (intermediate), MacOS(basic)
- Others Docker, AWS(ECS, EC2), Kubernetes(basic), Hadoop(basic), Spark(Intermediate)

Publications

- 2017 Nyambal, J. and Klein, R. (2017). Automated parking space detection using convolutional neural networks. In *2017 Pattern Recognition Association of South Africa and Robotics and Mechatronics (PRASA-RobMech)*, pages 1–6. IEEE.

Training

- 2017 High Performance Computing Winter School at Stellenbosch University: C & Python programming for cluster computing., *Hosted by the CHPC*, CSIR.

Talks

- 4 April 2018 **Introduction to Machine Learning and Deep Learning: Indaba X Cameroon 2018**, *Deep learning IndabaX Centrafrique*, Ecole Nationale Supérieure Polytechnique de Yaoundé - Cameroon.
- 7 September 2018 **Computer vision in your daily life: Retro Rabbit Conference**, *Retro Rabbit Conference*, Retro Rabbit Pretoria - South Africa.
- 2 April 2019 **Machine Learning in Production: Indaba X Cameroon 2019**, *Deep learning IndabaX Cameroon*, L’Institut Français du Cameroun - Cameroon.
- 3 May 2019 **Deep Learning and its application: Indaba X Ethiopia 2019**, *Deep learning IndabaX Ethiopia*, Wolaita Sodo University - Ethiopia.
- 20 February 2020 **Deep Learning and its application: Johannesburg // AI - Machine Learning - Chatbots**, *Johannesburg // AI - Machine Learning - Chatbots*, Johannesburg - South Africa.

Extracurricular Activity

- 4 - 6 April 2018 **Co-Organizer Deep learning IndabaX Centrafrique**, *Ecole Nationale Supérieure Polytechnique de Yaoundé - Cameroon*.
- 2 - 4 April 2019 **Co-Organizer Deep learning IndabaX Cameroon**, *French Institute - Yaounde, Cameroon*.

References

- 1- **Dr. Richard Klein**, *Lecturer*.
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- 2- **Dr. Pravesh Ranchod**, *Lecturer*.
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Unit: School of Computer Science and Applied Mathematics
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- 3- **Prof. Turgay Celik**, *Professor*.
Institution: University of the Witwatersrand
Unit: School of Computer Science and Applied Mathematics
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- 4- **Jade Abbott**.
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Role: Machine Learning Engineer
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