

Julien Nyambal

Education

- 2019 - **PhD in Computer Science (Machine Learning)**, Supervisor: **Dr. Richard Klein**, University of the Witwatersrand, Johannesburg, South Africa.
Present
- 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

- 04/2018 – **Software Developer, Data Scientist**, *Retro Rabbit*, Johannesburg, South Africa.
Present
- **Automatic Parking Space Detection**: Improving the Honours project for automatic detection and comparison between Support Vector Machines (SVM) and Convolutional Neural Networks (CNN). We noticed that joining CNN as feature extractor and the SVM as classifier (linear or RBF) was slightly better than the CNN.
 - **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 ECS and leaving the images in ECR. That was to increase the faster ingestion of the request in production.
 - **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.
- 02/2019 – **Part Time Lecturer**, University of the Witwatersrand, Johannesburg, South Africa.
Present
- Introduction to Programming and Algorithms
 - Introduction to Data Structures And Algorithms
- 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
- 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**, *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 Pretoria - South Africa.
- 2 April 2019 **Machine Learning in Production**, *Deep learning IndabaX Cameroon*, L’Institut Français du Cameroun - Cameroon.
- 3 May 2019 **Deep Learning and its application**, *Deep learning IndabaX Ethiopia*, Wolaita Sodo University - Ethiopia.

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*.
Institution: University of the Witwatersrand
Unit: School of Computer Science and Applied Mathematics
E-mail: Richard.Klein@wits.ac.za
- 2- **Dr. Pravesh Ranchod**, *Lecturer*.
Institution: University of the Witwatersrand
Unit: School of Computer Science and Applied Mathematics
E-mail: Pravesh.Ranchod@wits.ac.za
- 3- **Prof. Turgay Celik**, *Professor*.
Institution: University of the Witwatersrand
Unit: School of Computer Science and Applied Mathematics
E-mail: Turgay.Celik@wits.ac.za