

# 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.**

## Experience

- 04/2018 – **Software Developer, Data Analyst, Retro Rabbit, Johannesburg, South Africa.**  
Present
- 02/2019 – **Part Time Lecturer, University of the Witwatersrand, Johannesburg, South Africa.**  
Present
  - Introduction to Programming 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), Matlab, Java, Scala(basic), C++(basic), L<sup>A</sup>T<sub>E</sub>X, 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)

## Projects

**Automated Parking Space Detection, Python, Keras, Octave/Matlab, Scikit-learn.**

Improving the Honours project for automatic detection and comparison between Support Vector Machines and Convolutional Neural Networks.

## Awards

- Rector's fund **Merit Award, 2012.**  
Best achiever undergraduate student with annual average of above 80% in all modules, University of Zululand
- Project **2nd Best Software Engineering group Project Leader (SmartDrive), 2013.**  
Award Created and developed the second best working native android for my 2nd year group project. Receive an award of best project leader, University of Zululand

- Faculty Award **Best 3rd year Computer Science student in Faculty of Science, 2014.**  
University of Zululand
- DST-CSIR **Inter-bursary Support Programme Scholarship, 2016.**
- ABSA **Most Commercially Viable Project - Computer Science, 2016.**  
Best poster presentation under the Most Commercially Viable Project category when presenting Honours projects to companies for external assessment.  
University of the Witwatersrand, Johannesburg
- DST-CSIR **Inter-bursary Support Programme Scholarship, 2017.**
- Deep Learning Indaba 2017 **Won 'Machine Learning: A probabilistic Perspective by Kevin Murphy', September 2017.**  
Poster presentation awarded (Automated Parking Space Detection) for innovative use of deep learning techniques.  
University of the Witwatersrand, Johannesburg
- 8<sup>th</sup> PG X-Faculties Symposium **Certificate of participation:, October 2017.**  
Flash talk and poster presentation about my Master's project, **Automated Parking Space Detection.**  
University of the Witwatersrand, Johannesburg
- DST-CSIR **Inter-bursary Support Programme Scholarship, 2018.**

## 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