



## **Giresse Franck Noudjiep Djiepkop**

**M.Eng., CSAEMS, DEECE, CPUT 2018**

### **Reconfiguration of a feeder with integrated renewable energy sources and its benefits to the power utility and society**

Franck's research work focuses on the development of a computational method to solve the distribution network feeder reconfiguration problem. The Distributed Generation (DG) placement and sizing problem influences the dispatchable and non-dispatchable optimization problem solutions. The impact of the feeder reconfiguration, optimal DG placement, sizing and their benefits will be highlighted as part of his presentation.

Franck graduated with a Bachelor degree in Electrical Engineering (Cum Laude) in 2015 from Cape Peninsula University of Technology (CPUT), Bellville Campus. His BTech Project focused on Unified Power Flow Controller (UPFC) to improve the performance & operation of an electrical transmission system. Prior to completing his bachelor's degree, Franck worked with MLT Drives, a manufacturer of hybrid inverter systems for the renewable energy industry, and a distributor of turn-key solar back-up, off-grid, and grid tied solar systems. His work at MLT Drives triggered his interest in research.

His research interest is in field of computational intelligence and parallel computing applications to solve the power system optimization problems at the distribution level. Novel method and software for parallel solution of the reconfiguration optimisation problem of a feeder with integrated renewable resources are developed. The software is implemented in a cluster of computers. Currently Frank is finalizing his MEng. Thesis for September 2018 graduation. Franck have been working as a Research Assistant and a Part-time Lecturer at the Centre for Substation Automation and Energy Management Systems (CSAEMS) within Department of Electrical, Electronic, and Computer Engineering, CPUT since 2015.