

CURRICULUM VITAE

Msc. Aphrodis Nduwamungu



CONTACT INFORMATION:

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PERSONAL DATA:

Nationality : Rwandan
Date of Birth : 1 January 1984
ID No : 21838913
Passport No : A162273
Marital Status : Married
Gender : Male
Religion : Christian
Language : English, Chinese, Kinyarwanda

CAREER OBJECTIVES:

To find a position, which utilizes my competency, capability, skill and education, to scale new heights of success with hard work, dedicate and leave a mark of excellence on every step and work for assignments, which involves analytical capability and professional growth, and to gain more knowledge and practical experience in my work place

PROFILE:

I am a determined, polite, hardworking and reliable person, willing to take challenges of learning and expanding my knowledge. I enjoy being a team player, working with people and creating an effective working environment. I am self-motivated, honest and able to meet deadlines.

ACADEMIC QUALIFICATIONS:

- **2014-2017: *Master degree in Control Science and Engineering***, at the Tianjin Polytechnic University –CHINA, under the School of electrical engineering and automation, Topic *for thesis title “Frequency and voltage regulation of an islanded Microgrid” by using different controllers namely: Droop control and PQ controllers.*
- **2008-2012: *Bachelor’s degree in Electrical power engineering*** at the **National University of Rwanda**, Faculty of Applied Science , **Bachelor’s Degree Research Title : AC versus DC in High Voltage Power Transmission: Simulation a Typical East Africa Network (Matlab design).**
- **2007- 2008 : *Language certificate of English and French***, at the National University of Rwanda,School of Foundation language Skills,
- **1997-2005: *Advanced Level Certificate A2 Mathematics and physics***, at the Groupe scolaire de Runyombyi.

PROFESSIONAL EXPERIENCE:

- ✓ **2018/*March-up to now*** working as Research, laboratory engineer at the African Centre of Excellence in Energy for Sustainable Development based at the College of Science and Technology under the University of Rwanda.
- ✓ **9/2017--12/2017:** Assessor of graduate students in mechanical and manufacturing department as part-time. Institute of technologies of Burukinafaso (Musanze campus)
- ✓ **2015- 8//52017:** Tutor of computer technology and English business, at the Tianjin Institute of software Engineering, china
- ✓ **2015-2017 :** President of Rwanda Diaspora in Tianjin Province (CHINA), People’s Republic of CHINA (PRC)
- ✓ **2011/3-7/2011:** Industry Attachment in shagasha tea Factory, Department of Machinery processing officer.
- ✓ **2012-2014 :** Teacher of physics and electricity ,at the Groupe scolaire de Runyombyi
- ✓ **2006-2007:**Teacher of Physics at Tyazo High school

Publications and Participation

1. *Design ,Control and Validation of a PV system based on Supervisory Control and Data Acquisition (SCADA) Viewer in Smartgrids*,authord: Nduwamungu Aphrodis, Ntagwirumugara Etienne, Bikorimana Jean Marie Vianney,Mulolani Francis,presented at the 2019,5th International Conference on Control, Automation and Robotics.
<https://ieeexplore.ieee.org/document/8813711>
2. *Energy Management and Control Strategy of DC source and Micro turbine Generation system by using PQ controller and Droop control. Therefore, it is published in the special issue Green hybrid system for Power Generation in Remote Zones Non-Connected to Grid in International Journal of Energy and Power Engineering.*
<https://www.semanticscholar.org/paper/Energy-Management-and-Control-Strategy-of-DC-Source-Aphrodis/b439d817f8f515456cacd7a0ea0f1a0165fda13c>
3. *Frequency and voltage regulation of an islanded microgrid and available on international market on the following websites:*
<https://www.morebooks.de/> ISBN(978-620-2-01661, <https://www.amazon.com>, ISBN(978-620-2-01661-2)
4. *Review on the Coordination and Energy Management of Microgrids broad based on PQ controller and Droop control. Some useful information is given in this paper.*
<https://www.scirp.org/journal/paperinformation.aspx?paperid=77836>
5. **I am Editorial Board Members** in International Journal of Energy and Power Engineering (IJEPE);ISSN:2326-957X,(Print)ISSN:2326-960X(Online)
<http://www.sciencepublishinggroup.com/j/ijepe> and responsible for the reviews and quality of the research papers since 31/1/2018 until 2020.
6. Comparison of nonlinear autoregressive neural networks without and with External inputs for PV power prediction I am co-authored and it will be presented at the 2019 International Conference on Communication Technology, Electronic Engineering and Computer Engineering (CTEECE).
7. **Dynamic Grid Fault Analysis in Wind Power Plant with DFIG (under review of 3rd International Conference on Power and Energy Applications to be held during April 24-26, 2020 in Busan, South Korea)**
8. **Investigation of fault -Ride through (FRT) Behavior in HVDC System by Using Supervisory Control and Data Acquisition Viewer (SCADA VIEWER). (under writing)**
- 9.

PRESENTATION AND PARTICIPATION

1. **6/12/2016**, I attended and presented one of my researches called control technology of microgrids in islanded mode at the Science and Technology Forum of First Session of Tianjin Polytechnic University, Chinese Foreign Culture Communication Festival where I got an award certificate as best presenter.
2. I attended an international conference of symposium on microgrids held in Tianjin People's Republic of China in 2014.

3. I attended a seminar of computer technology and English business under HP delivery center at Tianjin Institute of Software Engineering in People's Republic of China.

WORKSHOPS/TRAININGS/TRAINER

1. **Trainer** on Power engineering/Microgrids/Smartgrids for regional and National level at the ACE-ESD based at the College of Science and Technology/University of RWANDA held at the ACE-ESD from 6th -10th May, 2019 every year.
2. I attended a training on proposal writing on refundable grant organized by National Commission of Science and Technology of RWANDA (**NCST**) and Science Granting Councils Initiative from 22nd -24th July, 2019
3. I attended a training organized by Lucas Nulle Germany company on Power engineering, Microgrid and smartgrid from 3rd -14th September, 2018.
4. I attended a short course on “Organic semiconductor material for Photovoltaic and other optoelectronic Applications: Synthesis and Structure-Property Relationships”
5. I attended a training of a one month at the Colorado state University/Power house Institute and covered the following topic:
 - Developed an understanding of representative laboratory equipment including laboratory infrastructure, measurement instruments, power supplies and controlled loads.
 - Developed and executed hands-on tests on several devices common to off-grid power systems, including: Battery charge and discharge behavior characterization.
 - Operation of a peak-power tracking photovoltaic converter using emulated photovoltaic generation, battery, and loads.
 - Gained experience automating testing and recording results from multiple instruments.
6. Actively participated in the ACE-ESD workshop on writing Incubation proposal and ACEESD won it.
7. Actively participated in the ACE-ESD workshop on writing PASET proposal.
8. Attended the training organized by Hangzhou regional center for small hydropower plant in Rwanda **13rd November up to 7 December, 2019**
9. Trained by Lucas Nulle Company from 28th to 8th November: Power engineering /Power electronics and storage system.
10. The training was organized by Ministry of infrastructure of Rwanda (MININFRA) with the support of **International Atomic Energy Agency (IAEA) on MESSAGE (Model for Energy Supply Strategy Alternatives and their General Environmental Impact) and started from 9-13rd March/2020.**

AWARDS

1. Awarded certificate **EDITORIAL BOARD MEMBERSHIP in** International Journal of Energy and Power Engineering (IJEPE).
2. Awarded Certificate of English Proficiency language by National University of Rwanda
3. Awarded certificate of French language by National University of RWANDA
4. Awarded certificate of Best presenter at the Science and Technology Forum /Chinese Culture Communication Festival.
5. Awarded certificate of Trainer on Power engineering/Microgrid/Smart grids for regional and National level at the ACE-ESD based at the College of Science and Technology/University of RWANDA held at the ACE-ESD from 6th -10th May, 2019 after organized and delivered a training at the ACE-ESD.

INTERESTS/ HOBBIES:

- Reading inspirational literature, Biblical Literature newspapers, magazines and periodicals.
- Listening to gospel music and watching popular T.V
- Likes watching Sports especially football, Tennis and cricket.

REFEREES

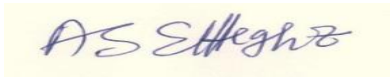
1. UTETIWABO Wellars, Email: wellarach@gmail.com, PhD student in Beijing Institute of Technology (BIT),Phone number : +8613041033700
2. Daniel Zimmerle , Senior Research Associate, Energy Institute, Colorado State University of USA,Director, Electric Power Systems Laboratory, phone number : 970-581-9945 (cell), dan.zimmerle@colostate.edu
3. Professor.Zhaoxia Xiao, Email: xiaozhaoxia@tjpu.edu.cn, Phone number: +86 592 2185674, Professor at Tianjin Polytechnic University/P.R.China in the School of Electrical Engineering and automation.
4. Chen Xian, Email: chenxian91@qq.com,Phone number: +8615868166884, Academic secretary in Tianjin Institute of Software Engineering.

RESEARCH INTEREST

- Distributed generation of Microgrid and Smart grids technology, droop controller, PQ controller, energy management, Modeling and control strategy of microgrids.
- Battery charging and discharging system and Power system stability and dynamic control.

DECLARATION

I, the undersigned, certify that to the best of my knowledge belief, the bio-data given correctly describes the true me according to the qualification.

A handwritten signature in blue ink, appearing to read "AS Ettegho", is centered on a light yellow rectangular background.

APHRODIS NDUWAMUNGU