

CURRICULUM VITAE

A. Personal Identity

1. Full Name (with Titles) : Prof. Ir. Ontoseno Penangsang MSc. PhD
2. Functional Position : Professor
3. Structural Position : --
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B. Educational Background

	Undergraduate	Postgraduate	Doctoral
Name of Institution	ITS	University of Wisconsin – Madison - USA	University of Wisconsin – Madison - USA
Field of Study	Teknik Tenaga Listrik (<i>Electrical Power Engineering</i>)	Power System Analysis	Power System Analysis
Year of Enrollment - Graduation	1968 - 1974	1977 - 1979	1979 - 1983

C. Brief Description of Research Relevant to Scientific Development in the Field of Study

Integration of Renewable Energy on Electrical System: Phenomena, Simulation, Analysis, and Mitigation

D. Research Experience within the Last Five Years

No.	Year	Research Title	Source of Funding
1	2020	Pengaruh Penetrasi Pembangkit Intermiten terhadap Penyebaran Harmonisa pada Sistem Kelistrikan Sulbagsel (<i>The Effect of the Penetration of Intermittent Generator on the Harmonic Distribution on South of Sulawesi</i>)	2020 ITS (Department) Funds
2	2020	Self-Healing pada System Distribusi Listrik menggunakan Fuzzy dan Spanning Tree berbasis Sistem Informasi Geografis (<i>Self-Healing on Electrical Power Distribution System using Fuzzy and Geographical-Information-System-based Spanning Tree</i>)	Ministry of Research and Technology-Higher Education Funds
3	2020	Perencanaan Terkoordinasi dalam Mitigasi Penyebaran Harmonisa untuk Peningkatan Kualitas Daya Sistem Distribusi Radial menggunakan Inertia Weight Particle Swarm Optimization (<i>Coordinated Planning on the Mitigation of the Harmonics Distribution for the Quality Improvement of the Radial Distribution System's Power</i>)	Ministry of Research and Technology-Higher Education Funds
4	2019	Pengembangan Metode Operasi Sistem Tenaga Listrik Mempertimbangkan Ketidakpastian Pasokan dari Pembangkit Listrik Berbasis Energi Terbarukan (<i>The Development of Electrical Power System's Operation Method with the Consideration of the Supply Uncertainty of Supply from Renewable Energy-based Power Plants</i>)	ITS Laboratory Research
5	2019	Pengembangan Aplikasi Cerdas Hemat Energi Berbasis Demand Side Management untuk Peningkatan Performance Smart Grid (<i>The Development of Demand Side Management-based Energy-saving Smart Application</i>)	Higher Education Excellence Applied Research
6	2018	Pengembangan Metode Pengoperasian Sistem Tenaga Listrik Dengan Pembangkit Listrik Berbasis Energi Baru Terbarukan Mempertimbangkan Penggunaan Perangkat Penyimpan Energi dan Kapasitas Saluran Dinamis (<i>The Development of Electrical Power System's Method of Operation with Renewable Energy-based Power Plants with the Consideration of the Usage of Energy Storage Device and Dynamic Channel Capacity</i>)	ITS Laboratory Research
7	2018	Desain Prototype Smart Switch Skala Rumah Tangga berbasis K-means Clustering NN untuk Mengatur Penggunaan Energi Listrik (<i>Household Scale Prototype of K-means Clustering NN-based Smart Switch Design to Regulate Electrical Energy Use</i>)	Higher Education Excellence Applied Research (PUPT)
8	2017	Penambahan Trafo Tap Changer berbasis Quantum Behaved Differential Evolution (QDE) untuk	2017 ITS (Department) Funds

		Mengoptimalkan Rugi-Rugi Daya pada Sistem Microgrid Skala Laboratorium (<i>The Addition of Quantum-behaved Differential Evolution (QDE)-based Tap Changer Transformer for the Optimization of Power Losses on Laboratory scale Microgrid System</i>)	
9	2017	Pengembangan Metode Pengoperasian Sistem Tenaga Listrik Dengan Pembangkit Listrik Berbasis Energi Baru Terbarukan dan Perangkat Penyimpan Energi (<i>The Development of Electrical Power System's Method of Operation with Renewable Energy-based Electric Power Generator and Energy Storage Device</i>)	ITS Laboratory Research
10	2017	Pemodelan dan Simulasi Koneksi Jaringan Distribusi Daya Listrik Tiga Fasa Menggunakan Sumber Pembangkit Daya berbasis Energi Terbarukan Untuk Sistem Mikrogrid Skala Laboratorium (<i>Modelling and Simulation of Three-Phase Electrical Power Distribution Network Connection Using Renewable Energy-based Power Sources for Laboratory Scale Microgrid System</i>)	Higher Education Excellence Research (PUPT)
11	2016 (Year 2/3)	Pemodelan dan Simulasi Koneksi Jaringan Distribusi Daya Listrik Tiga Fasa Menggunakan Sumber Pembangkit Daya berbasis Energi Terbarukan Untuk Sistem Mikrogrid Skala Laboratorium (<i>Modelling and Simulation of Three-Phase Electrical Power Distribution Network Connection Using Renewable Energy-based Power Sources for Laboratory Scale Microgrid System</i>)	Higher Education Excellence Research (PUPT)
12	2016 (Year 3/3)	Pemodelan dan Simulasi Koneksi Jaringan Distribusi Daya Listrik Tiga Fasa Menggunakan Sumber Pembangkit Daya berbasis Energi Terbarukan Untuk Sistem Mikrogrid Skala Laboratorium (<i>Modelling and Simulation of Three-Phase Electrical Power Distribution Network Connection Using Renewable Energy-based Power Sources for Laboratory Scale Microgrid System</i>)	Higher Education Excellence Research (PUPT)

E. Community Service Experience within the Last Five Years

No.	Year	Title of Community Service
1	2019	Penyuluhan Sistem Otomasi Untuk Perkebunan Hidroponik Di ITS Eco Farm Surabaya (<i>Counseling for Automated System for Hydroponic Garden in ITS Eco Farm Surabaya</i>)
2	2019	Penyelesaian Pelaksanaan Pekerjaan Studi Stabilitas Sistem Timor Tahun 2019 - 2023, PT PLN (Persero) Unit Induk Wilayah Nusa Tenggara Timur (<i>Completion of the Work Implementation of the Timor Stability System Study Years 2019 – 2023, PT. PLN (Persero) East Nusa Tenggara Main Unit</i>)

3	2019	Penyelesaian Pelaksanaan Jasa Konsultan Studi Sistem Kelistrikan Sumbawa PT PLN (Persero) Unit Induk Wilayah Nusa Tenggara Barat, PT PLN (Persero) Unit Induk Wilayah Nusa Tenggara Barat (<i>Completion of Consultant Service for the Implementation of the Sumbawa Electricity System Study in PT. PLN (Persero) West Nusa Tenggara Region Main Unit</i>)
4	2019	Penyelesaian Pelaksanaan Jasa Konsultansi Studi Desain Interkoneksi Jaringan Tegangan Tinggi Dari Pulau Bangka ke Pulau Belitung, PT PLN (Persero) Unit Induk Wilayah Bangka Belitung (<i>Completion of Consultancy Service for High Voltage Network's Interconnection from Bangka Island to Belitung Island Design Study, PT. PLN (Persero) Bangka Belitung Region Main Unit</i>)
5	2018	Pengembangan Automatic Weather Controlling And Ph-Nutrient Dozing With Pv Pump Untuk Teknologi Budidaya Hidroponik Sebagai Upaya Mengurangi Angka Gizi Buruk Di Pulau Sumba (<i>Development of Automatic Weather Controlling and PH-Nutrient Dozin with PV Pump for Hydroponic Cultivation Technology as an Effort to Reduce the Number of Malnourishment in Sumba Island</i>)
6	2018	Penyusunan Kajian Masterplan Kelistrikan Kalimantan Sumber Dana APLN Tahun 2017 PT PLN (Persero) Kantor Pusat (<i>Preparation of the Kalimantan Electricity Master Plan Study of the 2017 APLN Source of Funds PT PLN (Persero) Head Office</i>)
7	2018	Penerapan PV Pump Air Laut untuk Proses Destilasi Air Laut Guna Memenuhi Kebutuhan Air Bersih di Pulau Ay Kepulauan Banda Naira (<i>Implementation of Sea Water PV Pump for Sea Water Distillation for Fulfilling the Need of Clean Water in Ay Island, Banda Neira Islands</i>)
8	2017	Training untuk para staf PT.Hutama Karya/Angkasa Pura II (<i>Training for PT. Hutama Karya/Angkasa Pura II staffs</i>)
9	2017	Pengembangan Water Filter - PV untuk Teknologi Elektroklorinasi dan Filtrasi/Adsorpsi pada Pengolahan Limbah Bekas Air Wudhlu sebagai Penyediaan Air Bersih Kegiatan Eco Garden SDIT AL USWAH Surabaya (<i>Development of Water Filter – PV for Electrochlorination Technology and Filtration/Adsorption on Ablution Water Waste Management as Clean Water Provision for SDIT AL USWAH Surabaya Eco Garden Activity</i>)

F. Experience Writing in the Journal of Scientific Articles Within the Last Five Years

No	Scientific Article Title	Vol/No/Year	Title of Journal
1	Load Active Power Transfer Enhancement using UPQC-PV-BES System with Fuzzy Logic Controller.	Vol 13, No. 2, 2020	International Journal of Intelligent Engineering and Systems
2	New Enhanced Symbiotic Organism Search for Optimal Location and Sizing of Distributed Generation in Radial Distribution System	Vol 13, No. 5, 2020	International Journal of Intelligent Engineering and Systems
3	Stability and reliability of low voltage hybrid AC-DC microgrids power flow model in islanding operation	2020	Indonesian Journal of Electrical Engineering and Computer Science
4	Dynamic Optimal Power Flow Incorporating Gas Turbine Generator Unit with Compressed Natural Gas Systems	2019	International Review of Electrical Engineering
5	Transient power quality performance of multi photovoltaics using MPPT P and O/MPPT fuzzy	Vol.:16 Issue: 6 2018	Telkomnika (Telecommunication)

			Computing Electronics and Control)
6	Distribution Network Reconfiguration Using Binary Particle Swarm Optimization to Minimize Losses and Decrease Voltage Stability Index	2018	Bulletin of Electrical Engineering and Informatics
7	High performance of unified power quality conditioner and battery energy storage supplied by photovoltaic using artificial intelligent controller	Vol.: 11 Issue: 4 2018	International Review on Modelling and Simulations-IREMOS
8	Optimal Expenditure and Benefit Cost Based Location, Size and Type of DGs in Microgrids Systems Using Adaptive Real Coded Genetic Algorithm	Vol.: 16 Issue: 1 2018	Telkomnika (Telecommunication Computing Electronics and Control)
9	Wind-PV Hybrid System Modeling Using Bidirectional Converter with MPPT-Dual Adaptive Neuro Fuzzy Inference System (ANFIS) in Microgrid Isolated System	Vol: 11 Issue:11 2016	Journal of Engineering and Applied Sciences
10	Power Transfer Enhancement in Hybrid AC-DC Microgrids	Vol: 11 Issue: 7	Journal of Engineering and Applied Sciences

G. Experience on Oral Delivery of Paper on a Conference/Seminar within the Last Five Years

No	Name of Conference	Scientific Article Title	Time and Place
1	2018 10th International Conference on Information Technology and Electrical Engineering (ICITEE)	Security Constrained Optimal Power Flow Considering Dynamic Line Rating;	24-26 July 2018; Kuta, Indonesia
2	2018 4th International Conference on Science and Technology (ICST)	A Study of Harmonic Spreading Against Distribution Network Reconfiguration in Passive Radial Distribution Systems;	7-8 Aug. 2018; Yogyakarta, Indonesia
3	2018 International Conference on Information and Communications Technology, ICOIACT 2018	Combined economic emission dispatch with cubic criterion function using cuckoo search algorithm	6-7 March 2018, Yogyakarta, Indonesia
4	2018 International Joint Conference on Clean Energy and Smart Grid (CGESG 2018)	Design and Implementation of Real-time Monitoring Based on Android and HMI of PV Tower System for Laboratory Scale	February 24-26,2018, Asian Institute of Technology, Bangkok, Thailand
5	2018 International Joint Conference on Clean Energy and Smart Grid (CCESG 2018)	Design and Implementation of The Electrochlorination Filter Model Based on Solar Photovoltaic for Daily Watering Systems at Eco-Garden-SDIT Al Uswah Surabaya	February 24-26,2018, Asian Institute of Technology, Bangkok, Thailand.

6	IEEE Region 10 Annual International Conference, Proceedings/TENCON	Security constrained dynamic optimal power flow with multiple energy storage	
7	International Conference on High Voltage Engineering and Power Systems, ICHVEPS 2017	Online power flow management based on GIS for active distribution network management	
8	2017 International Seminar on Intelligent Technology and Its Application: Strengthening the Link Between University Research and Industry to Support ASEAN Energy Sector, ISITIA 2017	Optimal filter placement and sizing in Radial Distribution System using whale optimization algorithm	
9	2017 International Seminar on Intelligent Technology and Its Application: Strengthening the Link Between University Research and Industry to Support ASEAN Energy Sector, ISITIA 2017	Dynamic OPF considering different charging and discharging cost of energy storage using mixed-integer quadratic programming.	
10	2017 International Seminar on Intelligent Technology and Its Application: Strengthening the Link Between University Research and Industry to Support ASEAN Energy Sector, ISITIA 2017	Optimal filter placement and sizing in Radial Distribution System using whale optimization algorithm	

H. Experience on Book-Writing within the Last Five Years (Modul in soft form – My classroom)

No	Book Title	Year	No. of Pages	Publisher
1	Analisis Aliran Daya Pada Sistem Tenaga Listrik (<i>Power Flow Analysis on Electric Power System</i>)	2012	222	ITSPress

I. Experience on Training Program

No	Name of Training Program	Time and Place	Organizer
1			
2			

3			
4			
5			
6			

J. Acquisition of Intellectual Property Rights within the Last Five to Ten Years

No	Title/Theme of Intellectual Property Rights	Year	Type	Registration Number
1				
2				

K. Experience in Formulating Other Public Policy/Social Engineering within the Last Five Years

No	Title/Theme/Type of Already Implemented Social Engineering	Year	Place of Implementation	Public Response
1				
2				

L. Awards within the Last Ten Years (from the Government, Associations, or other Institutions)

No	Type of Awards	Awarding Institution	Year
1	LBE Award Program: Laboratory Based Education (LBE) for Young and Senior Researchers in all Majors in ITS Year 2013 (1 st Place in Senior Researcher Category)	ITS	2013
2	Short-term Training on the Project for Research and Education Development on Information and Communication Technology in ITS	JICA-JAPAN	2012
3	Head of Research Institution Period 1999 - 2003	ITS	2003
4	Civil Service of 20 Years Long Service Medal (Satyalancana Karya Satya 20 Tahun)	President of the Republic of Indonesia	2001
5	Dwidya Satya Madya Award	ITS	1999
6	Dwidya Satya Perdana Award	ITS	1995

All of the filled data dan written in the personal identity are true and can be accounted legally. If in the future, a discrepancy occurs, I will accept the risk.

Surabaya, 14 September 2020



PROF. IR. ONTOSENO PENANGSANG MSC. PHD