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# Favian Dewanta

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## Education

- 2016 - 2019 **Ph.D. in Electrical Engineering and Computer Science**, *Kanazawa University*,  
*CGPA 4.00/4.00.*
- 2011 - 2013 **M.Eng. in IT Convergence Engineering**, *Kumoh National Institute of Technology*,  
*CGPA 4.25/4.5.*
- 2005 - 2009 **B.Eng. in Telecommunication Engineering**, *Telkom University*, *CGPA*  
*3.33/4.00.*

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## Work Experience

- Sept 2014 - **Assistant Professor**, *Telkom University*, Indonesia.  
Now Giving lectures and doing researches
- Feb 2013 - **Embedded System Engineer**, *Crevis Co.*, Korea.  
Aug 2014 Doing project about networked control system
- March 2011 - **Full time researcher**, *Networked System Lab.*, Kumoh Nat. Inst. of Tech.  
now Doing project in field of industrial network, writing paper, attending conference
- Feb 2010 - **Embedded System Engineer**, *CV Versatile Silicon*, Indonesia.  
Feb 2011 Doing project in field of embedded system technology (hardware and software)
- April - June **Internship**, *PT Datacomm Diangraha*, Indonesia.  
2009 Doing project of metro-Ethernet for 3G backhaul network
- Sept 2007 - **Research Assistant**, *Electronics Laboratory*, Telkom Inst. of Tech.  
Nov 2009 Doing research in field of electronic circuit and power line communication

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## Doctoral Dissertation

- Title *Trust Establishment for Fog Computing Service in Vehicular Network*
- Supervisors Dr. Eng. Masahiro Mambo (Prof. in Kanazawa University)
- Description This research discuss trust establishment of fog computing service in vehicular network by considering urban and rural area cases.

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## Master Thesis

- Title *Traffic Aware Network Recovery Scheme on Switched Ethernet for Naval Combat System*
- Supervisors Dong-Sung Kim, Ph.D. (Professor in Kumoh National Inst. of Tech.)
- Description This research investigates performance of networked naval combat system using switched-Ethernet for several real time traffic with certain period and size in network failure case.

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## Bachelor Thesis

Title *Design and Realization of Optical Coupler in Low Voltage Power Line Communication*  
Supervisors Dr. Basuki Rahmat, Dr. Erna Sri Sugesti  
Description This research designs and realizes optical coupler to mix and separate between power and communication signal in power line.

## Projects Experience

Apr - Jun 2009 Installation and maintenance of metro-Ethernet for 3G Backhaul network  
July - Nov 2009 Design and realization of optical coupler in low voltage power line communication  
Feb - Apr 2010 PC-based channel coding implementation of digital audio broadcasting (DAB) using C and Python  
Jun 2010 Hardware security in baby's incubator using CPLD  
Jul - Aug 2010 Firmware update of AVR AT Mega 64 and GUI integration  
Sep 2010 - Feb 2011 Design and realization field server system using ATMega128 integrated with GSM/GPRS module and Ethernet controller  
Apr - Dec 2011 Design and prototyping CAN bus redundancy and fault tolerant on ship engine system using AT90CAN128  
Jan - Jul 2012 Networked ship engine system verification and data monitoring testing  
Aug 2012 - Feb 2013 Performance evaluation of fault tolerant and redundancy in naval combat system using switched Ethernet

## International Journals

**F. Dewanta** and M. Mambo, *A Mutual Authentication Scheme for Secure Fog Computing Service Handover in Vehicular Network Environment*, in IEEE Access, vol. 7, pp. 103095-103114, 2019. (SJR Q1, IF 4.098)  
D. Perdana, A. Nugroho, **F. Dewanta**, *Performance Evaluation of DV-HOP and Amorphous Algorithms based on Localization Schemes in Wireless Sensor Networks*, in Telkomnika, vol 16, issue 3, pp 1150-1157, 2018. (SJR Q2)  
D. Perdana, **F. Dewanta**, I. P. D. Wibawa, *Extending Monitoring Area of Production Plant Using Synchronized Relay Node Message Scheduling*, in International Journal of Communication Networks and Information Security (IJCNIS), vol 9, no 1, 2017. (SJR Q3)

## International Conferences

**F. Dewanta** and M. Mambo, *Bidding Price-Based Transaction: Trust Establishment for Vehicular Fog Computing Service in Rural Area*, 2019 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops), Kyoto, Japan, 2019, pp. 882-887.  
M. M. Ulkhaq, **F. Dewanta**, *Original observations-based control charts for monitoring the mean of auto-correlated processes: A comparison among modified Shewhart, modified EWMA, and ARMAST charts*, in AIP Conference Proceedings, vol 1902, issue 1, pages 020039, 2017.  
P. D. Wibawa, E. Susanto and **F. Dewanta**, *Maximum allowable time delay on networked control system using guaranteed cost method*, 2016 International Conference on Control, Electronics, Renewable Energy and Communications (ICCEREC), Bandung, 2016, pp. 91-95.

**F. Dewanta**, F. P. Rezha, D.S. Kim, *Message Scheduling Approach on Dedicated Time Slot of ISA100.11a*, Int Conf. on ICT Convergence 2012 (ICTC 2012), Oct. 2012, pp.466-471

**F. Dewanta**, D.S. Kim, *Parameter-based Dynamic Message Scheduling on CAN Bus for Distributed Control Unit of Intelligent Ship Engine System*, 5th International Universal Communication Symposium, October 2011

## Domestic Journal

**F. Dewanta**, D.S. Kim, R. Munadi, *Message Scheduling on CAN BUS for Ship Engine Systems*, in Teknika, vol 1, issue 1, 2016.

## Domestic Conferences

**F. Dewanta**, D.S. Kim, *Message Scheduling on CAN Bus for Distributed Control Unit of Intelligent Ship Engine System*, 13th Conference of Electronic Information and Communication, December 2011, pp. 107 - 110

**F. Dewanta**, A. D. Nugroho, D.S. Kim, *Message Scheduling Scheme for ISA100.11a Industrial Wireless Networks*, Sustainable ICT Conference (SITC) 2012 , November 2012

## Award

Best paper award from KICS in 13th Conference of Electronic Information and Communication (CEIC 2011), entitled "Message Scheduling on CAN Bus for Distributed Control Unit of Intelligent Ship Engine System"

## Languages

Indonesian Native

English Fluent

*IELTS 6.5 in November 2014, TOEIC 810 in October 2012*

## Computer skills

Basic HTML, Matlab, Python

Fluent C/C++, Java, latex

Tools ONE Simulator, NS, Netbeans, Openstack, Docker, Miktex, Raspberry-pi

Environments Windows, Ubuntu, Raspbian

## Reference

Advisor Prof. Masahiro Mambo

Email: mambo@ec.t.kanazawa-u.ac.jp

Website: <http://iseclab.ec.t.kanazawa-u.ac.jp/>

Advisor Prof. Dong-Sung Kim

Email: dskim@kumoh.ac.kr

Website: <http://nsl.kumoh.ac.kr>