

## LIST OF ACHIEVEMENT

**Rhiza S. Sadjad**

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### Summary



**Rhiza S. Sadjad**, was born in **1957**, completed his elementary and secondary education at his home town Bogor, Indonesia. He received his first college degree of **Ir.** from the Department of Electrical Engineering, Bandung Institute of Technology (ITB), Bandung, Indonesia in **1981**, then received the **M.S.E.E.** (1989) and the **Ph.D.** (1994) majoring in Automatic Control Systems from the Department of Electrical and Computer Engineering, University of Wisconsin, Madison WI, USA.

In **1981** he took a teaching position at the Faculty of Electrical Engineering, Satya Wacana Christian University in Salatiga, Central Java, Indonesia, then moved to the Department of Electrical Engineering, Hasanuddin University, Makassar, South Sulawesi, Indonesia in **1983** and has been with this department until now. He founded the Control Systems and Instrumentation Laboratory in **1995** and has been the head of the laboratory since then. He teaches almost all courses in automatic control systems area, and has recently been interested in the process control systems and technology. He has supervised a Ph.D. dissertation (completed in **2010**) to develop a process control mini-plant for industrial solid materials, and now is advising undergraduate and masters students whose final projects and thesis are related to the field of process control technology.

### *Current Positions at Hasanuddin University Makassar:*

- ♦ **Senior Lecturer**, Dept. of Electrical Engineering, Fac. of Engineering
- ♦ **Lecturer**, Graduate Programs:
  - ♦ Electrical Engineering, Masters (S2) Program, Fac. of Engineering
  - ♦ Communication Science, Masters (S2) Program, Fac. of Social and Political Sciences
- ♦ **Head**, Control Systems and Instrumentation Laboratory, Dept. of Electrical Engineering, Fac. of Engineering
- ♦ **Chairman**, Computer, Control and Electronics Sub-study Program, Dept. of Electrical Engineering, Fac. of Engineering
- ♦ **Deputy Head**, Information and Communication Technology Center (PTIK)
- ♦ **Member**, Hasanuddin University Senate
- ♦ **Member**, Faculty of Engineering Senate
- ♦ **Member**, Project Implementation Unit (PIU) Team for Faculty of Engineering New Campus

## Educational Background

Level	Department/University	Degree	Year	Field of Study
<b>S1</b>	Dept. of Electrical Engineering, Fac. of Industrial Technology, Bandung Institute of Technology ( <b>ITB</b> ), Bandung INDONESIA	Sarjana Teknik ( <b>Ir.</b> )	<b>1981</b>	Electronics and Control Systems
<b>S2</b>	Dept. of Electrical and Computer Engineering, University of Wisconsin-Madison, WI USA	Masters of Science in Electrical Engineering ( <b>M.S.E.E.</b> )	<b>1989</b>	Automatic Control Systems
<b>S3</b>	Dept. of Electrical and Computer Engineering, University of Wisconsin-Madison, WI USA	Doctor of Philosophy ( <b>Ph.D.</b> )	<b>1994</b>	Automatic Control Systems

## Research Experience

Research Projects	Year
<i>"Electrical Power Demand Forecast in South Sulawesi"</i> , PLN and LPPM UNHAS	1996-1997
<i>"External Plan DIVRE VII, Customers Satisfaction Survey (<b>CSS</b>) and Geographical Information System (<b>GIS</b>)"</i> , PT. TELKOM and LP UNHAS	1996-1997
<i>"Laboratory Scale Modelling and Design of the SCADA for the South and South-East Sulawesi Electrical Power System"</i> , RUT VI, LIPI	1998-1999
<i>"Adaptive Controller for Non-Linear Plants"</i> , TPSDP Research Grant	2003-2004
<i>"Intelligent System Design for Mechatronic System Application"</i> , TPSDP Research Grant	2004-2005

## Current Teaching Positions

Course Title	Study Program/Degree
<b>Odd Semester:</b>	
Signal and System Analysis	Electrical Engineering/S2
Numerical Methods and Modelling	Electrical Engineering/S2
Optimization Methods for Electrical Power Systems	Electrical Engineering/S
ICT for Language Teaching	English Education/S2
Basic Control Systems	Electrical Engineering/S1
Control Systems	Electrical Engineering/S1
Process Control Technology	Electrical Engineering/S1
Control Systems Design	Electrical Engineering/S1
Optimal Control Systems	Electrical Engineering/S1
Numerical Modelling and Simulation	Electrical Engineering/S1
Linear Algebra	Informatics/S1

S1=Bachelor S2=Masters

**Current Teaching Positions (*continued*)**

Course Title	Study Program/Degree
<b><i>Even Semester:</i></b>	
Electric Motor Modelling and Control	Electrical Engineering/S2
Process Control Systems	Electrical Engineering/S2
Information & Communication Technology	Mass & Devl. Comm./S2
ICT for Disaster Management	Disaster Management/S2
Linear Systems	Electrical Engineering/S1
Digital Control Systems	Electrical Engineering/S1
Analog Modelling and Simulation	Electrical Engineering/S1
Numerical Computational Methods	Informatics/S1
Modelling and Simulation	Informatics/S1

S1=Bachelor S2=Masters

**Professional Experience**

1981-1983	<i>Lecturer</i> , Faculty of Electrical Engineering, Satya Wacana Christian University, SALATIGA
1983-now	<i>Lecturer</i> , Dept. of Electrical Engineering, Fac. of Engineering, Hasanuddin University, MAKASSAR
1984-1986	<i>Technician</i> , Distance Education System via Satellite (SISDIKSAT), Eastern Indonesian Universities Association (BKS-PTN-INTIM), Central Office, MAKASSAR
1995-now	<i>Lecturer</i> , several Private Universities and Colleges in MAKASSAR and vicinity
1996-2003	Hasanuddin University <i>Local Coordinator</i> , SISDIKSAT BKS-PTN-INTIM, MAKASSAR
1997-now	<i>Head</i> , Control Systems and Instrumentation Lab., Dept. of Electrical Engineering, Fac. of Engineering, Hasanuddin University, MAKASSAR
1997-now	<i>Lecturer</i> , Hasanuddin University Graduate Programs, MAKASSAR
1999-2003	<i>Head</i> , Hasanuddin University Research Center's Division of Information, Computer and Science & Technology Dissemination, MAKASSAR
2000-2002	<i>Chairman</i> , Task Force for the Preparation of ADB-assisted TPSDP Self Evaluation Report and Sub-Project Proposal, Hasanuddin University Electrical Engineering Study Program
2002-2004	<i>Project Coordinator</i> , ADB-assisted TPSD Sector Project, Batch II, Electrical Engineering Study Program Hasanuddin University
2002-2003	<i>Technical Assistant</i> , DUE-Like Project, Civil Engineering Study Program, Fac. of Engineering, Tadulako University, Palu
2004	<i>Technical Assistant</i> , ADB-assisted TPSD Sector Project, Batch III, Electronic Engineering Study Program, Makassar State University
2002-2003	<i>Chairman</i> , Department of Electrical Engineering, Faculty of Engineering, Hasanuddin University, Makassar, INDONESIA
1988-1994	<i>US Procurement Representative</i> , PT. Compact Microwave Indonesia (CMI), BANDUNG
1994-1995	<i>System Engineer</i> , PT. Compact Microwave Indonesia (CMI), BANDUNG
1988-1992	<i>Foreign Correspondent (US)</i> , WARTA EKONOMI Weekly, JAKARTA

### Participation in International Events:

- o "The IEEE International Conference on Systems Engineering", Dayton, Ohio, USA, August 24-26, 1989.
- o Short Course on "Battery Technology for Product Design", University of Wisconsin, College of Engineering, Dept. of Engineering Professional Development, Madison, Wisconsin, May 20-21, 1996.
- o "First International Forum on Advanced Satellite Communications in the Asia-Pacific Region", NASDA, Tokyo, Japan, October 25-26, 1999.

### List of Publications

#### Academic

- Doctoral Dissertation:  
    **"Sampled-Data Control Systems with Varying Sampling-Rate"**, University of Wisconsin, Madison, WI, U.S.A., 1994
- Masters Thesis:  
    **"Addition of Sampler, Zero Order Hold and Digital Compensator to the Existing Linear Control Systems Simulation (LCSS) Program"**, University of Wisconsin, Madison, WI, U.S.A., 1989

#### Recent Publications and Presented Papers

**Sadjad**, Rhiza S., "Ohm's Law with Temperature Correction in a Case of Alternating Current (AC) Circuit with a Resistive Load", Jurnal Ilmiah "JETC" ISSN:1829-7021, Vol. 2 No. 2 Juni 2008 .

**Sadjad**, Rhiza S. "Membangun Sistem Informasi Berbasis Jaringan Komputer", Jurnal Penelitian Komunikasi dan Media Massa ISSN:1411-0385, Vol. 10 No. 17, Juni 2007.

**Sadjad**, Rhiza S. "The Eigenvalue Multiplicity Problem in the Pole-Placement Method of State-Variable Feedback Control Design" Jurnal Ilmiah "Elektrikal Enjiniring" ISSN: 1412-8357 Vol.04 No. 03 Sep-Des 2006

**Sollu**, Tan Suryani and Rhiza S. **Sadjad**, "Rancangan Awal Implementasi Distributed Queue Dual Bus (DQDB) pada Jaringan Area Kampus Universitas Hasanuddin", Jurnal INTEK (accredited), ISSN: 0653 - 1597, Tahun ke-14, No. 1 Feb. 2008.

**Samman**, Faizal A., Ruslan, Syafrida and Rhiza S. **Sadjad**, "Implementasi Kendali Adaptif Model Acuan Berbasis Metode Gradien dalam Rangkaian Elektronika Analog", Jurnal INTEK (accredited), ISSN: 0653 - 1597, Tahun ke-10, No. 2, Juni 2004.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "Reconfigurable Analog Fuzzy Controller Design, Part 1: Fuzzifier Circuit", The Third International Seminar on Intelligent Technology and Its Application (SITIA), Surabaya, Indonesia, May 7 2002.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "*Reconfigurable Analog Fuzzy Controller Design, Part 2: Fuzzy Inference Circuit*", The Third International Seminar on Intelligent Technology and Its Application (SITIA), Surabaya, Indonesia, May 7 2002.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "*Reconfigurable Analog Fuzzy Controller Design, Part 1: Defuzzifier Circuit*", The Third International Seminar on Intelligent Technology and Its Application (SITIA), Surabaya, Indonesia, May 7 2002.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "*Analog Fuzzy Controller Circuit Design for Control Application*", The Fourth Asian Control Conference (ASCC) in affiliation with International Federation of Automatic Control (IFAC), Singapore, September 25-27, 2002.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "*Analog MOS-Circuit Design for Reconfigurable Fuzzy Logic Controller*", The IEEE Asia Pacific Conference on Circuits and Systems (APCCAS), Singapore, December 16-18, 2002.

**Samman**, Faizal A., Rhiza S. **Sadjad** and Eniman Y. **Syamsuddin**, "*The Reconfigurable Membership Function Circuit Using Analog Bipolar Electronics*", The IEEE Asia Pacific Conference on Circuits and Systems (APCCAS), Singapore, December 16-18, 2002.

**Samman**, Faizal A. and Rhiza S. **Sadjad**, "*Reconfigurable Analog Fuzzy Logic Controller Design Using CMOS Integrated Circuit Technology*", *Majalah Ilmiah TEKNIK ELEKTRO* Vol. 9, No. 1, April 2003, Departemen Teknik Elektro FTI, ITB, Bandung.

## Other Publications

- *Technical Manuals, Operating Manual, Training-Guide, Technical Reports and Papers* on the Distance Education System via Satellite (SISDIKSAT), Eastern Indonesian Universities Association (BKS-PTN-INTIM), 1983-1986, 1994-2003.
- *Papers* on Control Systems Theory and Control Engineering curriculum development presented on several seminars, conferences and workshops, since 1994
- *Technical Manuals, Product Directory, Training Guides, etc.*, PT. Compact Microwave Indonesia (CMI), Bandung, 1994-1995
- *Popular articles and columns* published by campus, local dan national newspapers and magazines especially on the issues of Engineering Education and Electronic Industries, 1982-1990
- *Papers*, presented in several Workshops, Symposiums, Conferences, etc., held by the Indonesian Students Association in the USA (PERMIAS), 1987-1992.
- *Papers, Talks and Presentations* on Computer Networking and the INTERNET presented in several Workshops, Symposiums, Conferences, etc. in MAKASSAR and vicinity, since 1995.
- *Scientific Papers in Control Engineering*, presented in several national and international seminars held by professional associations, 2000-2002.