CURRICULUM VITAE

A. Personal Identity

1	**Full Name (with title)**	**Dr. Achmad Arifin, S.T., M.Eng**
2	Functional Position	Associate Professor
3	Stuctural Position	Head of Departement
4	Staff ID Number	197103141997021001
5	National Lecturer Identification Number	0014037105
6	Place and Date of Birth	Sampang, 14 Maret 1971
7	Home Address	Puri Citra Rungkut E-7, Amir Mahmud St., Surabaya
8	Phone Number / Fax / HP	082257525915
9	Office Address	ITS Campus Arief Rahman Hakim St., Surabaya
10	Phone Number / Fax	031-5923644

B. Education Background

	Bachelor's	**Master's**	**Doctorate**
College Name	Sepuluh Nopember Institute of Technology	Tohoku University	Tohoku University
Field of Study	Electrical Engineering	Biomedical Engineering	Biomedical Engineering
Entry – Graduate Year	1990-1996	2000-2002	2002-2005

C. Research Experiences

No	Year	Research Subject	Funding Source
1	1997-1998	IIR filter untuk pengolahan sinyal ECG	Young Lecturer Research, DIKTI, DEPDIKBUD
2	1998-1999	Sistem Analisa Arrhtymia Digital	Young Lecturer Research, DIKTI, DEPDIKBUD
3	2000-2002	Feedback Control of FES Gait	Tohoku University
4	2002-2005	Gait Database for Rehabilitation Purpose	Tohoku University
5	2002-2005	Cycle-to-cycle FES Gait Control	Tohoku University
6	2006-2007	Closed-loop FES system for lower limb	TPSDP, ITS
7	2007-2008	Adaptive Fuzzy FES Controller	ITS & Tohoku University
8	2009-2011	Stimulasi Elektrik untuk penyembuhan luka	ITS
9	2011-2012	Pengembangan Portable FES System	ITS
10	2011-2012	Multichannel Wearable Movement Sensor	ITS Featured Research
11	2012-2013	Heartsound signal processing	ITS
12	2012-2013	Multijoint FES control	ITS Featured Research

13	2014	Noninvasive cardiac early detection system	Biomedical Engineering Consortium Research, DIKTI
14	2014-2015	Wearable FES System	ITS
15	-	Phonocardiac Signal Processing	ITS Research
16	2015-now	Pengembangan Stent Placement Guide System	Biomedical Engineering Consortium Research, DIKTI
17	2015-2016	Pengembangan Teknologi Rehabilitasi FES	National Competitive Grants, Ministry of Education and Culture
18	2016-2018	Pengembangan kursi roda elektrik dengan control hybrid	ITS Featured Research

D. Scientific Article Writing Experiences in Journals

No	Scientific Article Subject	Vol/No/Year	Journal Name
1	ANALYSIS AND METHODS TO TEST CLASSIFICATION OF NORMAL AND PATHOLOGICAL HEART SOUND SIGNALS	90/1/2016	Journal of Theoretical and Applied Information Technology
2	Signal Processing and Extensive Characterization Method of Heart Sounds Based on Wavelet Analysis	11/1/2016	International Review of Electrical Engineering (IREE)
3	Rancangan Kontroler Perangkat Keras EH1 Milano Dengan Modul Wireless Electronics	4/1/2015	Jurnal Teknik ITS
4	Perbaikan Sistem Kendali Robot Tangan EH1 Milano Menggunakan Sistem Kendali Loop Tertutup	4/1/2015	Jurnal Teknik ITS
5	Perancangan dan Implementasi Sistem Kendali Robot Tangan Prensilia	3/1/2014	Jurnal Teknik ITS
6	Aplikasi Bioelectrical Impedance Untuk Mengukur Gerakan Sendi Lutut Pada Bidang Sagital	2011	-
7	Preliminary Tests of a Practical Fuzzy FES Controller Based on Cycle-to-Cycle Control in the Knee Flexion and Extension Control	E92-D/7/2009	IEICE TRANSACTIONS on Information and Systems
8	A Feasibility Study of Fuzzy FES Controller Based on Cycle-to-Cycle Control: An Experimental Test of Knee Extension Control	E91-D/3/2008	IEICE TRANSACTIONS on Information and Systems
9	An Error Reduction Method of Portable, Low-Cost Joint Angle Sensor System for Human Movement Measurement and Control	69/-/2008	IEICE Technical Report, MBE
10	An Experimental Test of Knee Joint Control by Fuzzy FES Controller Based on Cycle-to-Cycle Control	45/4/2007	Trans. of the Japanese Society for Medical and Biological Engineering
11	Design of Fuzzy Logic Controller of the Cycle to Cycle Control for Swing Phase of Hemiplegic Gait Induced by FES	E89-D/4/2006	IEICE Trans. Inf. & Syst.

12	A Test of Stimulation Schedules for the Cycle-to-Cycle Control of Multi-joint Movements of Swing Phase of FES-induced Hemiplegic Gait	30/1/2006	Journal of the Society of Biomechanisms
13	Design of fuzzy controller of the cycle-to-cycle control for swing phase of hemiplegic gait induced by FES	89/4/2006	IEICE transactions on information and systems
14	"FES Control Method of the Swing Phase of Hemiplegic Gait Based on the Cycle-to- Cycle Control: Model Simulation Considering Floor Reaction Force,"	44/4/2006	Trans. of the Japanese Society for Medical and Biological Engineering
15	Computer Simulation Test of Fuzzy Controller for the Cycle-to-Cycle Control of Knee Joint Movements of Swing Phase of FES Gait	E88-D/7/2005	IEICE TRANSACTIONS on Information and Systems
16	A test of fuzzy controller of cycle-to-cycle control for controlling three-joint movements of swing phase of FES gait	25/-/2004	バイオメカニズム学術講演会予稿集
17	A Test of Fuzzy Controller for Cycle-to-Cycle Control of FES-induced Hemiplegic Gait: Computer Simulation in Single-joint Control	41/1/2003	生体医工学: 日本エム・イー学会誌
18	Design of Fuzzy Controllers for Cycle-to-Cycle Control of Swing Phase of FES-induced Hemiplegic Gait	24/-/2003	バイオメカニズム学術講演会予稿集
19	Cycle-to-Cycle Control of Swing Phase of FES-induced Hemiplegic Gait : A Computer Simulation with Different Controllers	102/481/2002	IEICE technical report

E. Oral Scientific Article Publication on Summit / Seminar Experiences

No	Summit Name	Scientific Article Subject	Time and Place
1	International Seminar on Intelligent Technology and Its Application	Embedded Fuzzy Logic Controller for Functional Electrical Stimulation System	2016
2	Asea Uninet Scientific and Plenary Meeting	A sequential hypothesis testing of multimodal cardiac analysis	2016
3	SEMINAR NASIONAL INOVASI DAN APLIKASI TEKNOLOGI DI INDUSTRI (SENIATI)	Realisasi Kontrol Hirarki Untuk Pengaturan Kecepatan Kursi Roda Elektrik Berdasarkan Subject Intension Menggunakan Bioelectrical Impedance	2016
4	International Seminar on Intelligent Technology and Its Applications, ISITIA	Design of wearable system for closed-loop control of gait restoration system by Functional Electrical Stimulation	2015
5	International Seminar on Intelligent Technology and Its Applications, ISITIA	A signal processing framework for multimodal cardiac analysis	2015
6	International Conference on Sensor, Sensor System and Actuator (ICSSSA)	Wearable Gait Measurement for Two Sensors and Force Sensing Resistor	2015

7	Seminar on Intelligent Technology and Its Applications	Discrete PID Control System Performance for IH2 Azzurra Hand Robot	2014
8	The 13th Seminar on Intelligent Technology and Its Applications	Segmentasi Suara Jantung S1 dan S2 Menggunakan Kurva Amplop	2013
9	Proceeding SITIA 2013	Analisis Ekstraksi Ciri Pada Suara Jantung Diastolik Dengan Menggunakan Wavelet Transform Dan Wigner Ville Distribution	2013
10	The 13th Seminar on Intelligent Technology and Its Applications	A Wearable Human Movement Measurement System: ~ Sensor Fusion and Signal Processing Method ~	2012
11	The 13th Seminar on Intelligent Technology and Its Applications	Identifikasi Suara Serak Berbasis Transformasi Wavelet Dan Algoritma Jaringan Syaraf Tiruan	2012
12	Proceeding – 2012 IEEE International Conference on Computational Intelligence and Cybernetics, CyberneticsCom	Exploration of cardiac valvular hemodynamics by heart sound analysis of hypertensive cardiac disease background patients	2012
13	The 6th Electrical Power, Electronics, Communications, Controls, and Informations Seminar	Penentuan Lower Limb Joint Angles Berdasar Respon Akselerometer dalam Pengembangan Wearable Sensor untuk FES	2012
14	The 13th Seminar on Intelligent Technology and Its Applications	Klasifikasi Sinyal Elektrokardiografi Menggunakan Wavelet Transform dan Neural Network	2012
15	Conference Paper	Analisa Suara Jantung Berbasis Complex Continuous Wavelet Transform	2012
16	The 6th Electrical Power, Electronics, Communications, Controls, and Informations Seminar	Ekstraksi Ciri Komponen Aortik dan Pulmonari Suara Jantung Diastolik dengan Menggunakan Analisis Nonstasioner	2012
17	The 6th Electrical Power, Electronics, Communications, Controls, and Informations Seminar	Disain Wireless Functional Electrical Stimulator Menggunakan X-Bee Pro	2012
18	Seminar Nasional Fisika Terapan III , Departemen Fisika, FST, Universitas Airlangga Surabaya	Sistem Instrumentasi Sinyal Electrocardiography Untukanalisa Dinamika Jantung	2012
19	The 6th Electrical Power, Electronics, Communications, Controls, and Informations Seminar	Analisa Sinyal Electrocardiography dan Menggunakan Continuous Wavelet Transform	2012

20	The 6th Electrical Power, Electronics, Communications, Controls, and Informations Seminar	Instrumentasi dan Pendeteksian Sinyal EMG Dinamik selama Elbow Joint Bergerak	2012
21	The 13th Seminar on Intelligent Technology and Its Applications	Ekstraksi Parameter Temporal Sinyal ECG Menggunakan Difference Operation Method	2012
22	Conference Paper	Analisa Nonstasioner Pada Auditory Evoked Responses	2011
23	National Conference of Electrical Engineering Forum	Karakterisasi Sinyal Elektrokardiografi menggunakan Transformasi Wavelet Kontinyu	2011
24	Proceeding of: SITIA 2009	PENGEMBANGAN SISTEM PENYEMBUHAN LUKA DENGAN STIMULASI LISTRIK	2009
25	Proceeding SENTIA 2009	PENGARUH STIMULASI LISTRIK TERHADAP PEMBULUH DARAH DAN JARINGAN IKAT FIBROUS PADA PENYEMBUHAN LUKA	2009, Malang National Polytechnic
26	The 48th Annual Conference of the Japanese Society for Med. & Biol. Eng.	A Basic Study on Simplified Joint Angle Measurement System for Evaluation of Rehabilitation of Motor Function	2009
27	IFMBE Proceedings	Ankle and knee joint angle measurements during gait with wearable sensor system for rehabilitation	2009, Munich
28	The 14th annual conference Japan Functional Electrical Stimulation Association	A Study on Knee Extension Control by Using Cycle-to-Cycle Control for FES Gait	2008, Okayama
29	The 47th Annual Conference of the Japanese Society for Med. & Biol. Eng	Swing Phase FES Control Based on the Cycle-to-Cycle Control Method: Experimental Test of Knee-joint Movements Control Using Fuzzy Controller	2008, Kobe
30	IEICE Scientific Seminar on Medical and Biological Engineering (MBE)	Low-Cost Joint Angle Sensor System for Human Movement Measurement and Control	2008
31	The 3rd Intl. Symp. Medical, Bio-Nano Electronics, COE Program	Application of Knowledge Engineering and Fuzzy System in Realizing Cycle-to-Cycle Control Method for Swing Phase of FES-induced Gait	2008, Tohoku University, Japan
32	電子情報通信学会技術研究報告	An error reduction method of portable, low-cost joint angle sensor system for human movement measurement and control	2008
33	11th Mediterranean Conference on Medical and Biomedical Engineering and Computing 2007	An Experimental Test of Fuzzy Controller Based on Cycle-to-Cycle Control for FES-induced Gait : Knee Joint Control with Neurologically Intact Subjects	2007, Slovenia

34	The 46th Annual Conference of the Japanese Society for Med. & Biol. Eng.	An Experimental Study of Knee Joiint Control Based on Cycle-to-Cycle Control for Restoring Gait by FES	2007
35	TPSDP-DIKTI Program	Pengembangan *Closed-loop Functional Electrical Stimulation* (FES) *System* Untuk Restorasi Motorik Pasien Stroke	2007
36	The 46th Annual Conference of the Japanese Society for Med. & Biol. Eng.	A Study of Stimulation Schedule for Controlling Swing Phase for FES-induced Gait of Hemiplegic Patients by Cycle-to-Cycle Control: Computer Simulation Considering Floor Reaction Force and Different Muscle Forces	2007
37	Research Instutute of Electrical Communication	A Study on FES Control Including the Stance Phase by Using A Gait Model of a Hemiplegic Patient	2007
38	IEICE Scientific Seminar on Medical and Biological Engineering (MBE)	A Study of FES Control for Swing Phase of Hemiplegic Gait based on the Cycle-to-Cycle Control: Model Simulations under Conditions of Varying Initial Joint Angles, Computer Simulation Test of Fuzzy Controller for the Cycle-to-Cycle Control of Knee Joint Movements of Swing Phase of FES Gait	2007
39	バイオメカニズム学会誌	A Test of Stimulation Schedules for the Cycle-to-Cycle Control of Multi-joint Movements in Swing Phase of FES-induced Hemiplegic Gait	2006
40	RECORD OF ELECTRICAL AND COMMUNICATION ENGINEERING CONVERSAZIONE TOHOKU UNIVERSITY	A Computer Simulation Study on the Cycle-to-Cycle Control Method of Hemiplegic Gait Induced by Functional Electrical Stimulation	2006
41	IEICE Scientific Seminar on Medical and Biological Engineering (MBE)	FES Control Method of the Swing Phase of Hemiplegic Gait based on Cycle-to-Cycle Control: Model Simulation Study on Stimulation Data for using Surface Electrode	Nov 2006
42	The 11th International Conference IFESS	A Basic Study of Fuzzy Controller for Cycle-to-Cycle Control of Knee Joint Movements of FES Swing: First Experimental Test with A Normal Subject	2006
43	Symposium on Med. & Biol. Eng.	FES Control Method of the Swing Phase of Hemiplegic Gait Based on the Cycle-to-Cycle Control: Model Simulation Considering Floor Reaction Force	2006
44	The 27th annual conference of Japanese Society of Biomechanisms	FES Control Method of the Swing Phase of Hemiplegic Gait Based on the Cycle-to-Cycle Control: Stimulation Data Test Based on EMG Pattern	2006, Kobe

45	The 13th Japan FES Association Conference	Knowledge Engineering Approach in Developing Framework of the Cycle-to-Cycle Control for Swing Phase of Hemiplegic Gait Induced by FES	2006, Kurume
46	The 6th Asian-Pacific Conference on Med. & Biol. Eng, IFMBE	A Test of Stimulation Schedules for the Cycle-to-Cycle Control of Three-joint Movements of Swing Phase of FES-induced Hemiplegic Gait,"	2005, Tsukuba
47	The 26th Annual Conference of the Japanese Society of Biomechanisms	Construction of the Musculo-skeletal Model for Development of Gait Control Method by using Functional Electrical Stimulation (FES)	2005, Otawara
48	The 12th Japan FES Association Conference	Fundamental Study on Development of Controlling Method of FES Gait by using Musculo-skeletal Model	2005, Sendai
49	The 25th Annual Conference of the Japanese Society of Biomechanisms	A Test of Fuzzy Controller of Cycle-to-Cycle Control for Controlling Three-joint Movements of Swing Phase of FES Gait	2004, Atsugi
50	The 42nd Annual Conference of the Japanese Society for Med. & Biol. Eng.	A Test of Fuzzy Controller for Cycle-to-Cycle Control in Compensating Muscle Fatigue	2003, Sapporo
51	The 24th Annual Conference of the Japanese Society of Biomechanisms	Design of Fuzzy Controllers for Cycle-to-Cycle Control of Swing Phase of FES-induced Hemiplegic Gait	2003, Nagano
52	Proc. Symp. on Med. & Biol. Eng	Computer simulation study of the cycle-to-cycle control using fuzzy controllers for restoring swing phase of FES-induced hemiplegic gait	2003, Sapporo
53	the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE Cat. No.03CH37439)	Fuzzy controller for cycle-to-cycle control of swing phase of FES-induced hemiplegic gait: a computer simulation in two-joints control	2003, Mexico
54	The 41st Annual Conference of the Japanese Society for Med. & Biol. Eng.	Comparison of Three Closed-loop Controllers for Knee-joint Movements of FES- induced Hemiplegic Gait	2002, Kyoto
55	The 23rd Annual Conference of the Japanese Society for Biomechanisms	Determination of Target Joint Angles for Cycle-to-Cycle Control-based Closed-loop Hemiplegic FES-induced Gait Control	2002, Okayama
56	The 36th Tohoku Chapter Conference of the Japanese Society for Med. & Biol. Eng.	A Test of Fuzzy Controller for Cycle-to-Cycle Control of FES-induced Hemiplegic Gait: Computer Simulation in Single-joint Control	2002, Sendai
57	IEICE Scientific Seminar on Medical and Biological Engineering (MBE)	Cycle-to-Cycle Control of Swing Phase of FES-induced Hemiplegic Gait: A Computer Simulation with Different Controllers,"	2002

F. Book Writing Experiences (Soft format module - My classroom)

No	Book Subject	Year	Number of Pages	Publisher
1	Pengantar Biomekanika	2016	-	ITS

G. Training Experiences

No	Training Subject	Date and Place	Organizer
1	Invited Lecture and Feloowship on Education in Biomedical Engineering	2008	Tohoku University
2	Speaker in ITS-NTUST Forum	2009	ITS-NTUST Taiwan
3	Formulation of Elektro ITS & Statistic & Control Inc. USA Cooperation	2010	ITS-S&C Inc.
4	Speaker in short course on Advanced Electronics, Topic : Wavelet Transform applications	2012	Elektro ITS
5	Speaker in FPGA Technology Training for National Code High School (STSN)	2012	ITS-STSN
6	Speaker in Workshop "Socialization of Quality Improvement in Braille For Special Education and Basic Education Special Service Development	2013	Directory of Special Education and Special Service Development and ITS
7	Speaker in Focus Group Discussion: Evaluation of Indonesia Education Scholarship Service	2013	LPDP
8	Speaker of Wireless Sensor Network	2013	ITS
9	Speaker of Hardware and Wireless Protocol Design Training for National Code High School (STSN)	2013	ITS-STSN

H. Awards (From Goverment, association or other institutions)

No.	Award Type	Awarding Institution	Year
1	Research Visiting Program, BME Graduate School, Tohoku University	Miyagi Prefectural Government, Japan.	2008
2	Research Visiting Program, Education Program for Biomedical and Nano Electronics, Tohoku University		2008
3	Japanese Government Fellowship Program for the Researcher of Disability Study, Japanese Society for Rehabilitation of Persons with Disabilities (JSRPD).	Japan's Goverment	2006
4	Monbukagakusho Scholarship, Doctoral Program	Ministry of Education, Culture, Sport, Science and Technology, Japan.	2002-2005
5	Monbusho Scholarship, Master Program	Ministry of Education Culture, Sport, Science and Technology, Japan.	2000-2002

All the data I filled and listed in this biodata is true and can be accounted by law. If later found inconsistancy with the reality, I am willing to accept the risk.

Surabaya, 17 August 2020

(Dr. Achmad Arifin, S.T., M.Eng)