

CURRICULUM VITÆ



Prof. Dr. Widodo Budiharto, S.Si., M.Kom

- *Professor in Artificial Intelligence*
- *Expert Trainer in Information Technology*

Contact:

Email: wbudiharto@binus.edu and prof.widodo.budiharto@gmail.com

HP: **08569887384**

Web: www.Widodo.com

Position:

Professor and Senior Researcher at School of Computer Science and Doctoral Computer Science, Bina Nusantara University, Jakarta-Indonesia

Visiting Professor, Hosei University, Koganei Campus, Japan, 2016.

Visiting Professor, Lorraine University -INRIA, France, 2017

Visiting Professor, Universite de Bourgogne, France, 2008

Wakil sekretaris, Reviewer Penelitian Nasional RI.

Education:

Bachelor, Physics, University of Indonesia 1995-2000

Master of Information Technology, STT Benarif Indonesia, 2001-2003

PhD, Electrical Engineering, ITS –Surabaya Indonesia, 2008-2012

Publications:

a. Journals

- Widodo Budiharto and Alexander Agung Santoso Gunawan, [Design and Algorithm for Electric Wheelchair using Voice Recognition and Joystick](#), ICIC Express Letters, Vol. 12(11), 2018, pp 1171-1174.
- Widodo Budiharto and Meiliana, Presidential Election Prediction using Twitter Textual Data and Sentiment Analysis, Journal of Big Data, Springer, 2018(revision).
- Andi Andi, Rio Rio, Lilis Sugianti, Meiliana Meiliana, Widodo Budiharto, [Short Message Service Application by Using Brain Control System and Support Vector Machine \(SVM\) on Single Channel Electroencephalography \(EEG\)](#), JTEC, vol 10(1-8), 2018
- Adler Haymans Manurung, Widodo Budiharto and Harjanto Prabowo, [Algorithm and Modeling of Stock Prices Modeling Based on Long Short Term Memory \(LSTM\)](#), ICIC Express Letters, Vol. 12(12), 2018..
- Anggita, Meiliana and Widodo Budiharto, [Bayesian Belief Network for Hunger Detection: Physical VS Emotional Eating](#), ICIC Express Letters, Japan, Vol. 11(3), pp. 575-581, March 2017.
- Widodo Budiharto and Chiharu Ishii, [Coffee Maker Robot Based on Simple Vocabulary and Partially Observable Markov Decision Process\(POMDP\)](#), ICIC Express Letters, Japan, Vol. 11(4), pp.757-762, April 2017
- Widodo Budiharto and Anggita, [Behavior-Based Humanoid Robot for Teaching Basic Mathematics](#), Internetwork Indonesia Journal, Vol 9(1), 2017.
- Widodo Budiharto, [Intelligent Surveillance Robot with Obstacle Avoidance Capabilities using Neural Network, Computational Intelligence and Neuroscience](#), USA, 2015.
- Widodo Budiharto, Pingkan C.B Rumondor and Meiliana, [Counselove: Marital Counseling Android-Based Application to Promote Marital Satisfaction](#), *International Journal of Electrical and Computer Engineering*, 7(3), pp. 542-550, 2017.
- The Framework of Widodo Budiharto, Lili Ayu Wulandhari, Akbar, [The Framework of Home Remote Automation System Based on Smartphone](#), International Journal of Smart Home, pp.53-60, January 2015. <http://dx.doi.org/10.14257/ijsh.2015.9.1.06>
- Widodo Budiharto et al, [Obstacles Avoidance for intelligent telepresence robot using Interval Type-2 FLC](#), ICIC Express Letters, vol. 8(3), pp.821-827, Japan, 2014.
- Widodo Budiharto, Bayu Kanigoro, Viska Noviantri, [Ball Distance Estimation and Tracking for Humanoid Robot](#), LNCS, vol 8407, pp.170-178, 2014
- Widodo Budiharto et al, *A Framework for SMEs using Loosely Coupled Web Services*, Journal of Software, vol (4), 2013.
- Widodo Budiharto, Welly Dwi Putra, Yudha Pratama Putra, [Design and Analysis of Fast Driver's Fatigue Estimation and Drowsiness Detection System using Android](#), Journal of Software, vol. 8(12), 2013.
- Ardiansyah, Brian Timothy and Widodo Budiharto, ["A Web Framework for SMEs \(Small and Medium Enterprises\) Portal using Loosly Web Services"](#), Journal of Software, vol 9(4), 2014.
- Widodo Budiharto, Jurike V. Moniaga, Meiliana, Alvina Aulia, [A Framework for Obstacles Avoidance of Humanoid Robot using Stereo Vision](#), International Journal of Advanced Robotics Systems, Austria, vol, 10(204:2013), 2013.DOI: 10.5772/55608
- Widodo Budiharto, et.al, *Genetic algorithm and Neural network for Optical Character Recognition*, Journal of Computer Science, vol 9(11), pp. 1435-1442, 2013. DOI : 10.3844/jcssp.2013.1435.1442
- Widodo Budiharto et al, [The Novel Method of Adaptive Multiplayer Games for Mobile Application using Neural Networks](#), International Journal of Mobile Computing and Multimedia Communications, 5(1), 10-24, January-March 2013.

- Widodo Budiharto, M. Shodiq, B. Kanigoro and Hutomo, 2012. “*The framework of Intelligent telepresence robot based on stereo vision*”. Journal of Computer Science, USA. 8: 2062-2067. DOI: 10.3844/jcssp.2012.2062.2067.
- Satrio Halim and Widodo Budiharto, [The Framework of Navigation and Voice Recognition System of Robot Guidance in Supermarket](#), International Journal of Software Engineering and Its Application, 2014.
- Widodo Budiharto et al , “*Robust Face Recognition and Tracking System using Bayesian Filtering and ANFIS Controller for Service Robots*”, International Conference on Advance Science and Contemporary Engineering”, Jakarta, 2012. Abstracted/indexed by SCOPUS. Published by Journal of Procedia Engineering.
- Widodo Budiharto, Purwanto D. and Jazidie A., “*A Robust Obstacle Avoidance for Service Robot using Bayesian Approach*”, International Journal of Advanced Robotic Systems, Intech Publisher, 2011.
- Budiharto W., Santoso A, Purwanto D. and Jazidie A., [A New method of Obstacle avoidance for Service Robot in Indoor Environment](#), Journal of Engineering Science, ITB, vol. 44 no 2, pp. 148-167, 2012.
- Widodo Budiharto, Santoso A, Purwanto D. and Jazidie A., [A Path Planning Strategy and Navigation for Service Robot](#)”, International journal of Behavior robotics, vol. 2(2), pp. 100-108, 2011.
- Widodo Budiharto, Santoso A., Purwanto D. and Jazidie A., [Multiple Moving Obstacles Avoidance of Service Robot using Stereo Vision](#), Telkomnika Journal, Vol. 9 no.3, pp.433-444, 2011.
- Christofer, A., Kusuma, C., Pribadi, V. and Budiharto, W. (2015). [The Notation Scanner Systems using Resilient Backpropagation Method](#), *Procedia of Computer Science*, 59, 98-105.
- Cempaka Sari A., Rahayu, A. and Budiharto, W. (2015). [Developing Information System for Attendance and Facebook Status for Binus University’s Lecturer using Raspberry Pi Architecture](#), *Procedia of Computer Science*, 59, 178-187

b. International Conferences

- Alexander A S Gunawan, Pribadi R Mulyono and Widodo Budiharto, [Indonesian Question Answering System for Solving Arithmetic Word Problems on Intelligent Humanoid Robot](#), 3rd International Conference on Computer Science and Computational Intelligence (ICCSCI 2018), Procedia Computer Science, Volume 135, 2018, Pp. 719-726.
- Bambang Krismono Triwijoyo, Widodo Budiharto and Edi Abdurachman, [The Classification of Hypertensive Retinopathy using Convolutional Neural Network](#), 2nd International Conference on Computer Science and Computational Intelligence (ICCSCI 2017), Procedia Computer Science, Volume 116, 2017, Pp. 166-173.
- Widodo Budiharto, Alexander Agung Gunawan Santoso, Jarot Suroso, Andry chowanda, Gaudy and Rheo, “*Fast Object Detection using Deep Learning for Drone*”, IEEE International Conference on Computer and Communication Systems (ICCCS 2018), Nagoya-Japan,27 -30 April 2018. DOI: [10.1109/CCOMS.2018.8463284](https://doi.org/10.1109/CCOMS.2018.8463284)
- Widodo Budiharto, Anggita, Pingkan C.B. Rumondor and Derwin Suhartono, [EduRobot: Intelligent Humanoid Robot with Natural Interaction for Education and Entertainment](#), Procedia Computer Science, 2017. <https://doi.org/10.1016/j.procs.2017.10.064>
- Widodo Budiharto and Pingkan C.B Rumondor, [Modeling of Natural Interaction and Algorithm of Intelligent Humanoid Robot for Education](#), IEEE ICMA, Takamatsu-Japan, 2017.
- Anggita and Widodo Budiharto, [Modeling Intelligent Human Resources Management Systems \(IHRMS\) using Big Data and SVM](#), ICAI 2017, Singapore, 24-26 Feb 2017.

- Widodo Budiharto and Anggita, [Behavior-Based Humanoid Robot for Teaching Basic Mathematics](#), ICIIOT, Bandung, 2016.
- Widodo Budiharto and Alexander Agung Santoso Gunawan, [Blind speech separation system for humanoid robot with FastICA for audio filtering and separation](#), 1st International Workshop on Pattern Recognition, 11-13 May Tokyo, 2016.
- Setiawan, R., Kurniawan, A., Budiharto, W., Kartowisastro, I.H., Prabowo, H. (2016). [Document Flexible affix classification for stemming Indonesian Language](#), *13th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology, ECTI-CON 2016*, Thailand.
- Widodo Budiharto, Meiliana and Alexander Agung Santoso Gunawan, [Development of coffee maker service robot using speech and face recognition systems using POMDP](#), 1st International Workshop on Pattern Recognition, 11-13 May Tokyo, 2016.
- Ivan Halim Parmonangan, Jennifer Santoso, Alexander Agung Santoso Gunawan, [Fast brain control systems for electric wheelchair using support vector machine](#), 1st International Workshop on Pattern Recognition, 11-13 May Tokyo, 2016.
- Widodo Budiharto et al, [Designing of Humanoid Robot with Voice Recognition Capability](#), The 3rd IIAE International Conference on Intelligent Systems and Image Processing 2015 (ICISIP2015), Japan 2015.
- Widodo Budiharto, [Intelligence Service Robot with Voice Recognition Capabilities](#), SAI Intellysis 2015, London. DOI: [10.1109/IntelliSys.2015.7361159](#)
- Widodo Budiharto et al, [Multiple Moving Obstacles Avoidance for Humanoid Service Robot using Stereo Vision and Bayesian Approach](#), 6th Asian Conference on Mathematical Modelling and Computer Simulation (AMS2012), pp. 1-6, Bali, 2012. Abstracted /indexed by IEEE Explore.
- Widodo Budiharto, [Multiple Moving Obstacles Avoidance Strategy for Humanoid Robot using Stereo Vision and Bayesian Approach](#), 6th Asian Conference on Mathematical Modelling and Computer Simulation, Bali, 2012.
- W. Budiharto, A. Santoso, D. Purwanto and A. Jazidie, [A Navigation System for Service Robot using Stereo Vision and Kalman Filtering](#), 11th International Conference on Control, Automation and Systems, Kintex – Korea, pp. 1771-1776, 2011.
- W. Budiharto, D. Purwanto and A. Jazidie, [A Novel Static and Moving Obstacles Avoidance Method for Service Robot using Bayesian Filtering](#), IEEE 2nd International Conference on Advances in Computing, Control and Telecommunication Technology, Jakarta, 2010.
- Widodo Budiharto, D. Purwanto and A. Jazidie, [Indoor Navigation using Adaptive Neuro Fuzzy Controller for Servant Robot](#), International Conference on Computer and Its Application, Bali, 2010.
- Widodo Budiharto, D. Purwanto and M. Heri Purnomo, [Improved Edge Detection using CNN](#), International Conference on Information and Technology, Banten, 2009.
- Widodo Budiharto, [Design of Tracked Robot with Remote Control for Surveillance](#), IEEE International conference on Advanced Mechatronics and Systems, Kumamoto Japan, pp.342-346, 10-12 August, 2014.
- Widodo Budiharto, [Robust Vision-Based Detection and Grasping Object for Manipulator using SIFT Keypoint Detector](#), IEEE International conference on Advanced Mechatronics Systems, Kumamoto Japan, pp.458-452, 10-12 August, 2014.
- Widodo Budiharto, Anggita Dian Cahyani, Pingkan C.B Rumondor and Derwin Suhartono (2017). [EduRobot: Intelligent Humanoid Robot with Natural Interaction for Students](#), 2nd ICCSCI 2017 and published by Procedia of Computer Science.

Books:

- Widodo Budiharto (2018), [Elektronika Digital dan Sistem Embedded](#), Andi publisher Yogya. isbn: 978-979-29-6855-2
- Widodo Budiharto(2018), [Pemrograman Python ilmu Komputer dan Teknik](#), Andipublisher Yogya. isbn: 978-979-29-6618-3
- Widodo Budiharto et al(2017), ***Pemrograman R untuk Sains dan Psikologi***, Deepublish Publisher, Yogyakarta. Isbn: 978-602-401-759-0.
- Widodo Budiharto (2016). [Machine Learning dan Computational Intelligence](#), Andi Offset Publisher, Yogyakarta. isbn: 978-979-29-5849-2
- Widodo Budiharto (2014). [Panduan Praktis Perancangan dan Pemrograman Hasta Karya Robot+cd](#), Andi Publisher, Yogyakarta. isbn: 978-979-29-4347-4
- Widodo Budiharto (2016). ***Knowledge and Information Retrieval***, Deepublish Publisher, Yogyakarta.
- Widodo Budiharto, ***Metode Penelitian untuk Ilmu Komputer dengan Komputasi statistika berbasis R***, Deepublish Publisher, Yogyakarta, 2015. isbn: 978- 602-280-948-7
- Widodo Budiharto and Djoko Purwanto (2015). [Robot Vision: Teknik Membangun Robot Cerdas Masa Depan \(Ed. Revisi\)](#), Andi Offset Publisher, Yogyakarta. isbn: 978-979-29-5019-9
- Widodo Budiharto (2014), [Modern Robotics with OpenCV](#), Science Publisher group, USA, isbn: 978-1-940366-12-8
- Widodo Budiharto (2014), [Robotika Modern, Teori dan Implementasi](#), Andi Offset Yogyakarta. Isbn: 978-979-29-2194-6.
- Widodo Budiharto (2014). [Web programming, Panduan Lengkap Pemrograman Web handal dengan J2EE dan MVC](#), Andi Offset Publisher, Yogyakarta, isbn: 978-979-29-4131-9
- Widodo Budiharto and Derwin Suhartono (2014). [Artificial Intelligence](#), Andi Offset Yogyakarta. isbn: 978-979-29-4222-4
- Widodo Budiharto, Ari Santoso, Djoko Purwanto and Achmad Jazidie (2011). ***An Improved Face Recognition System for Service Robot Using Stereo Vision, Face Analysis, Modeling and Recognition Systems***, Tudor Barbu (Ed.), ISBN: 978-953-307-738-3, InTech, Available from: <http://www.intechopen.com/articles/show/title/an-improved-face-recognition-system-for-service-robot-using-stereo-vision>.
- Widodo Budiharto & Djoko Purwanto, [Robot Vision, Teknik Membangun Robot Masa Depan](#), Andi offset Yogya, 2012.
- Widodo Budiharto, ***Aneka Proyek Mikrokontroler, Panduan utama untuk Riset/TA***, Grahallmu, 2011.
- Widodo Budiharto, ***Robot Tank dan Navigasi Cerdas***, Elex Media Komputindo, 2010.
- Widodo Budiharto, ***Robotika, Teori dan Implementasi***, Andi offset Yogya, 2010
- Widodo Budiharto, ***Kendali Cerdas Berbasis SMS/Web/TCP-IP***, Elex Media Komputindo, 2009.
- Widodo Budiharto, ***TeknikReparasi TV/AUDIO/DVD***, Elex Media Komputindo, 2008.
- Widodo Budiharto, ***Panduan Lengkap Pemrograman J2EE***, Andi Offset, 2005.
- Widodo Budiharto, ***E-Commerce Application using Visual C#.NET***, Andi Offset Publishing, 2004.
- Widodo Budiharto, ***Web Programming using J2EE***, Elex media Publishing, 2004.
- Widodo Budiharto, ***Computer Interfacing and Microcontroler 89c51***, Elex media Publishing , 2004
- Widodo Budiharto, ***Electronics Digital and Microprocessor***, Andi Offset Publishing, 2009

- Widodo Budiharto, **Guide for .net Programmer, Programming VB.NET for Office**, Elex media Publishing, 2002
- Widodo Budiharto, **Advanced Vb.NET Programming**, Elex media Publishing, 2003
- Widodo Budiharto, **Teknik Reparasi PC dan Monitor**, Elex Media Komputindo, 2005
- Widodo Budiharto, **Membuat Robot Cerdas** edisi revisi, Elex Media Komputindo, 2009
- Widodo Budiharto, **Programming VB .NET 2005**, Andi Offset Yogya, 2006
- Widodo Budiharto, **12 Proyek Akuisisi Data**, Elex Media Komputindo, 2007
- Widodo Budiharto (2005). **Aplikasi Database Oracle 10g dengan VB 6/ VB .NET**, Elex Media Komputindo.
- Widodo Budiharto (2004), **Antarmuka Komputer dan Mikrokontroler 89c51**, Elex media Publishing.
- Widodo Budiharto, (2004), **Interfacing Komputer dan Mikrokontroler**, Cetakan Kedua, PT Elex Media Komputindo: Jakarta. Isbn: 979-20-5831-1
- Widodo Budiharto (2003). **Pemrograman Vb.Net Tingkat Lanjut**, Penerbit Elexmedia Komputindo. Isbn: 979-20-4270-9
- Widodo Budiharto and Crist Evert Lisangan (2002), **Pemrograman VB.Net untuk Aplikasi Perkantoran**, Elex Media Komputindo.
- Widodo Budiharto (2001). **Aplikasi Database menggunakan VB.6 dan Sql Server 2000**, Elex Media Komputindo.