

BRIEF CV



Dr. Gigih Priyandoko

Senior Lecturer

Faculty of Mechanical Engineering,

Universiti Malaysia Pahang,

26600 Pekan, Pahang, MALAYSIA.

Tel: 609-424 6219, Fax: 609-424 2202

Email: gigih@ump.edu.my



**Universiti
Malaysia
PAHANG**
Engineering • Technology • Creativity

Academic Qualifications

1. Ph.D. (Mechanical -Applied Mechanics), Universiti Teknologi Malaysia, 2009
2. M.Eng. (Electrical), Institute Technology of Bandung, 1996
3. B.Eng. (Electrical), Universitas Brawijaya, 1991

H index

- 5 (Google scholar)
- 3 (Scopus)

Brief Profile

Gigih Priyandoko received B.Eng (Electrical) from the Universitas Brawijaya and M.Eng. (Electrical-Control) from the Institute Technology of Bandung, in 1991 and 1994, respectively, and the Ph.D (Mechanical-Applied Mechanics) from the Universiti Teknologi Malaysia 2009. In 1992 until 2008, joined the Faculty of Electrical Engineering, Universitas Widyagama Malang, Indonesia of as Lecturer. In 2009 joined the Faculty of Mechanical Engineering, Universiti Malaysia Pahang of as senior lecturer. Research interests include Vehicle Dynamics, Automotive Suspension, Intelligent Control, Crack and Leakage Pipe Petection.

Working Experiences / Appointment

1. June 2009 - Present : Senior Lecturer, Faculty of Mechanical Engineering, Universiti Malaysia Pahang
2. Jan 2007 - Dec 2007 : Senior Engineer, Advanced Power Solution, Sdn. Bhd., Shah Alam, Malaysia
3. Nov 1992 - Dec 2008 : Lecturer, Faculty of Electrical Engineering, Universitas Widyagama Malang, Indonesia

Expert Area

Vehicle Dynamics, Automotive Suspension, Intelligent Control, Crack and Leakage Pipe Petection

Research Area / Research Interest

Automotive Suspension, Application of Artificial Intelligent, Non-Destructive Testing

Teaching Experience

1. Semester I and Semester II, 2009/2010
BMM3613 Automatic Control, 3 credits, (180 Students)
BMM3532 Measurement and Instrumentation, 2 credits, (230 Students)
BMM4999 Industrial Training (5 students)
BMM3913 Final Year Project 1, 4 credits (5 Students)
2. Semester I and Semester II, 2010/2011
BMM3613 Automatic Control, 3 credits, (250 Students)
BMM 2433 Electrical & Electronics Technology, 3 credits, (230 Students)

- BMM3923 Final Year Project 2, 4 credits (5 Students)
 DMM3914 Final Year Project, 4 credits (3 Students)
 BMM3543 Mechanical Vibrations, 3 credits, (50 Students)
 DMM1422 Electrical Technology, 2 credits, (30 Students)
 BMM4999 Industrial Training (7 students)
3. Semester I and Semester II, 2011/2012
 BMM3613 Automatic Control, 3 credits, (15 Students)
 BMM3532 Measurement and Instrumentation, 2 credits, (60 Students)
 BMM3923 Final Year Project 2, 4 credits (6 Students)
 DMM3914 Final Year Project, 4 credits (2 Students)
 BMM3613 Automatic Control, 3 credits, (58 Students)
 BMM2433 Electrical & Electronics Technology, 3 credits, (80 Students)
 DMM2432 Electrical Technology, 2 credits, (28 Students)
 4. Semester I and Semester II, 2012/2013
 BMM3613 Automatic Control, 3 credits, (7 Students)
 BMM2433 Electrical & Electronics Technology, 3 credits, (93 Students)
 BMM1312 Computer Programming Lab, 1 credit, (28 students)
 BMM3923 Final Year Project 1, 4 credits (5 Students)
 BMM3613 Automatic Control, 3 credits, (60 Students)
 BMM2433 Electrical & Electronics Technology, 3 credits, (60 Students)
 DMM1423 Electrical & Electronics Technology, 3 credits, (50 students)
 BMM3923 Final Year Project 2, 4 credits (5 Students)
 5. Semester I and Semester II, 2013/2014
 MMM3613 Automatic Control, 3 credits, (7 Students), Master by course
 BMM2433 Electrical & Electronics Technology, 3 credits, (93 Students)
 DMM1423 Electrical & Electronics Technology, 3 credits, (50 students)
 BMM2433 Electrical & Electronics Technology, 3 credits, (63 Students)
 6. Semester I and Semester II, 2014/2015
 MMM3613 Automatic Control, 3 credits, (7 Students), Master by course
 BMM2433 Electrical & Electronics Technology, 3 credits, (23 Students)
 BMM3613 Automatic Control, 3 credits, (60 Students)
 BMM2433 Electrical & Electronics Technology, 3 credits, (60 Students)

Administration Post

1. Coordinator of Electrical & Electronics Technology subject in FKM, 2012-2014
2. Coordinator of Automatic Control subject in FKM, 2010-2012
3. Secretariat Viva Voce FKM Master Student, 9 October 2014
4. Ahli Jawatankuasa Kecil Pasca Siswazah, Jawatankuasa Penyelidikan dan Pengajian Siswazah FKM, 2014
5. Penyelaras Kurikulum Program BMM dan BMA, FKM, 2013
6. Ahli Jawatankuasa Task Force Program Master by Course FKM, 2013
7. Penyelaras Penerbitan FKM, 2009-2011

List of Student Activities

1. Proton Green Mobility Challenge 2012
2. Shell Eco Marathon 2010

Post Graduate Supervision

PhD

1. Ab Malik Awang Hamat, PhD student, *Co-Supervisor*, Leakage and Locate Detection in Water Pipeline Distribution using Pressure Transient Response (**in-progress**)

Master

1. Aravinthan A/L Yelumalai, Master Student, *Main-Supervisor*, Leakage and Locate Detection in MDPE pipe using Vibro Acoustic Modulation Method (**in-progress**)
2. Wan Sofian Wan Hamat, Master Student, *Co-Supervisor*, Leakage and Locate Detection in MDPE pipe using Time Reversal Method (**in-progress**)
3. Nur Cholís, Master student, *Main Supervisor*, Electro-Mechanical Single Acting Pulley Rubber V-Belt Continuously Variable Transmission for Scooter (**completed**)

4. Mohd. Azraai Mohd Razman, Master Student, *Main Supervisor*, Optimization of Bouc-Wen Model Parameters Identification Magneto-Rheological Fluid Damper using Particle Swarm Optimization (**completed**)
5. Mohd Zairi Baharum, Master student, *Co-Supervisor*, Electromagnetic Braking Using Eddy Current Resistance for Stationary Exercise Bike (**completed**)
6. Rosmazi Rosli, Master student, *Co-Supervisor*, Active Force Control with Iterative Learning Control Algorithm for a Vehicle Suspension (**completed**)

Post Graduate External Examiner

1. Amrul Faruq, Master Student, Universiti Teknologi Malaysia (UTM), PID Controller optimization for the Translational Motion of a Remotely Operated Vehicle using Metamodeling Technique (**completed**)

Degree Final Year Project Supervision

No	Academic Year	Name of Student	Research Title
1	2010/2011	Saiful Amin Kamaruddin	Skyhook Controller of Vehicle Semi-Active Suspension
2	2010/2011	Ahmad Zaim Solehin Che Hasan	Modified Skyhook Controller of Vehicle Semi-Active Suspension
3	2010/2011	Mohd Ezee Zaidee Ee	Skyhook Controller of Vehicle Active Suspension
4	2010/2011	Muhamad Rusydi Ali	Modified Skyhook Controller of Vehicle Active Suspension
5	2010/2011	Muhamad Amzansani Abd Wahab	Design Semi-Active Suspension using Magneto-Rheological Damper
6	2011/2012	Farah Wahida Yusof	Modelling a Magneto-Rheological damper using Neural Network Back-propagation
7	2011/2012	Mohamad Luqman Zaki Monsarif	Modelling a Magneto-Rheological damper using Neural Network Simulated Annealing
8	2011/2012	Mohd Fikri Arifin	Modelling Magneto-Rheological damper using Radial Basis Function
9	2011/2012	Muhammad Afiq Naquiddin Abd Rahman	Modelling Magneto-Rheological damper using Recurrent Neural Network
10	2011/2012	Ameer Farez Amre	Modelling Magneto-Rheological damper using Neuro Fuzzy
11	2011/2012	Mohd Ridzwan Ramli	Modelling Magneto-Rheological damper using ANFIS method
12	2012/2013	Ariffin Abdullah	Vibration Suppression of flexible Beam Using Electromagnetic Shunt Damper
13	2012/2013	Hasan Zainal Abidin	Vibration Suppression of flexible Beam Using Eddy Current Damper
14	2012/2013	Mohd Izuan Hashim	Vibration Suppression of flexible Beam Using Passive Shunts Damper
15	2012/2013	The Swee Ing	Passive Control Vibration of Vehicle Engine Mounting
16	2012/2013	Mohd Helmi Bin Rasid	Acoustic Emission Analysis for Bearing Condition Monitoring
17	2013/2014	Tan Siew Fun	Plastic Pipe Defect Detection using Nonlinear Acoustic Wave Modulation
18	2013/2014	Tan Wan Ching	Plastic Pipe Crack Detection using Ultrasonic Guided Wave Method
19	2013/2014	Corina A/P R. Govinda Kumar	Steel Pipe Defect Detection using Nonlinear Acoustic Wave Modulation
20	2013/2014	Azirah Bt Hazemi	Damping Rate Comparison For Passive and Semi-Active Suspension System Using Different Concentration of Magnetic Fluid
21	2013/2014	Lim Eng Kok	Small Defect Bearing Monitoring using Acoustic Emission Method
22	2014/2015	Nurshahadah Bt Nasiruddin	Steel Pipe Defect Detection using Time Reversal Method
23	2014/2015	Amir Fitri bin Zaidi	DC Motor Speed and Position Control using Arduino
24	2014/2015	Nur Syahirah Bt Ibrahim	Monitoring Hazardous Malaysian Automotive Gases

Diploma Final Year Project Supervision

No.	Academic Year	Name of Student	Research Title
1	2010/2011	Muhamad Ali Mohamed	Fuel-saving device helical spring based on gasoline fuel car
2	2010/2011	Mohamad Sazman Sazali	Fuel-saving device plate electrode based on gasoline fuel car
3	2010/2011	Siti Haifullia Ayob	Fuel-saving device rod electrode based on gasoline fuel car
4	2011/2012	Ahmad Zaki Zaimani	Development hydrogen gas generator for dual fuel engine using Yull Brown method
5	2012/2013	Mohd Fathi Ashraf Zakaria	Design and fabricate single link manipulator arm using DC motor

List of Research / Project

1. Low Frequency Modulation of Ultrasonic Guided Wave Method for small Crack Pipeline Detection, RDU, Leader (*on-going*)
2. A New Technique of Leak Detection in a Gas Pipeline Network Based on Time Reversal Method and Non Linear Acoustic, FRGS, Member (*on-going*)
3. Development of Prototype Semi-Active Absorber Utilizing Piezoelectric Ultrasonic Motor, RDU, Member (*on-going*)
4. Development of Real Time Monitoring Welding Defect Detection System, RDU, Member, (*on-going*).
5. Development of a Permanent Magnet Motion Driver for Electricity Power Generation and Vehicles, RDU, Member (*on-going*)
6. Development of a New Comprehensive Model-based Controller using Arduino and Android Applications in Intensive Critical Unit, Hospital Tengku Ampuan Afzan, Kuantan, RDU, Member (*on-going*)
7. A New Technique of Leak Detection in a Gas Pipeline Network Based on Time Reversal Method and Non Linear Acoustic, FRGS, Team Member, (*on-going*).
8. Leak Detection in a Steel Pipeline System by Empirical Mode Decomposition (emd) Analysis of a Pressure Transient, RAGS, Member (*on-going*)
9. Enhancement of Stress Resistance in Squeezed Mode MR Fluid Through Optimization of Materials Parameters, RAGS, Member (*on-going*)
10. Electrostatic Charging of Diesel Particulate Matter from Automobile Exhaust Gas, 08/07/2011-08/07/2013, FRGS, Researcher,
11. Mixture Formulation and Combustion Characteristics of Diesel-Hydrogen Dual Fuel Engine, FRGS, 15/09/2010-14/09/2012, Researcher
12. Development of Real Time Monitoring Welding Defect Detection System, 15/12/2011-14/12/2012, RDU-UMP, Researcher
13. Design and Development of Magneto-Rheological Damper, RDU-0903142, 1/12/2009 – 31/5/2011, RDU-UMP, Project Leader
14. Design of Mixer System for Diesel-Water Emulsion as New Renewable Fuel, RDU-UMP, 01/10/2009-30/11/2010, Researcher
Design and Fabrication of Solar Car Power and Drive System, RDU-100324, 2010/2011, RDU-UMP, Researcher
Design and Fabrication of Solar Car Body and Chassis, RDU100362, 01/05/2010-30/04/2011, RDU-UMP, Researcher

List of Journal Reviewer

1. International Journal of Modelling, Identification and Control (IJMIC), UK, (Impact Factor: 0.24), 3 papers
2. International Journal of Vehicle Autonomous Systems (IJVAS), UK, (Impact Factor: 0.31), 1 paper
3. Advances in Mechanical Engineering, Hindawi Publishing Corporation, 1 paper
4. The Institution of Engineers (IEM), Malaysia, 1 paper
5. Journal of Engineering, Science and Technology (JESTEC), (Scopus index), Taylor's University of College, Malaysia, 1 paper
6. International Journal of Automotive and Mechanical Engineering (IJAME), (Scopus index), UMP, Malaysia, 13 papers
7. Journal of Mechanical Engineering and Sciences (JMES), UMP, Malaysia, 9 papers
8. Jurnal Teknologi, UTM, 2 papers

List of Conference Reviewer

1. International Conference on Automotive Innovation and Green Energy Vehicle (AIGEV2014), August 26 - 27, 2014, Kuantan, Malaysia.
2. The 3rd International Conference on Mechanical Engineering Research (ICMER2013), 18-19 August 2015, Kuantan, Malaysia.
3. 4th International Conference on Noise, Vibration and Comfort NVC 2012, November 26-28, 2012, Kuala Lumpur, Malaysia
4. Regional Conference on Automotive Research (ReCAR), Kuala Lumpur, 14-15 December, 2011
5. International Conference of Mechanical Engineering Research 2011 (ICMER2011), 5-7 December 2011, Kuantan, Malaysia.

6. The Second National Conference in Mechanical Engineering for Research & Postgraduate Students (2nd NCMER 2010), December 3 – 4, 2010, Pekan, Malaysia.

List of Publications

JOURNAL

5 ISI AND 12 SCOPUS INDEXED

2014

1. Rosmazi Rosli, Musa Mailah, **Gigih Priyandoko**, Hardware-in-the-Loop Simulation for Active Force Control with Iterative learning Applied to an Active Vehicle Suspension System, *4th International Conference on Mechanical and Manufacturing Engineering (ICME 2013) Location: Bangi Putrajaya, MALAYSIA Date: DEC 17-18, 2013, Sponsor(s): Univ Tun Hussein Onn Malaysia, Fac Mech & Mfg Engr, 4TH MECHANICAL AND MANUFACTURING ENGINEERING, PTS 1 AND 2 Book Series: Applied Mechanics and Materials, Volume: 465-466, Pages: 801-805, Published: 2014. (ISI).*
2. Rosli, R., Mailah, M., **Priyandoko, G.** Active suspension system for passenger vehicle using active force control with iterative learning algorithm, *WSEAS Transactions on Systems and Control*, 9, pp. 120-129, 2014 (Impact Factor: 0.57, Scopus Index)
3. Mohd Azraai Razman, **Gigih Priyandoko**, Ahmad Razlan Yusoff, Bouc-Wen Model Parameter Identification for a MR Fluid Damper using PSO, *Applied Mechanics and Materials*, Vol. 529, pp. 279-284, 2014. (Scopus index)
4. Mohamad Zairi Baharom, Mohd Zaki Nuawi, Mohammad Syuhaimi Ab-Rahman, **Gigih Priyandoko**, Che Ku Eddy Nizwan, Mohd Szali Salleh, Air-gap Effect on Single Axis Vibration of Electromagnetic Braking Using Eddy Current on Bearing Cage, *Applied Mechanics and Materials* Vol. 663 (2014) pp 400-405. (Scopus index)
5. M.Z. Baharom¹, M.Z. Nuawi and **G. Priyandoko**, Parameter Analysis of Electromagnetic Braking Using Fully Nested and Two Way ANOVA, *Applied Mechanics and Materials* Vol. 663 (2014) pp 193-197 (Scopus index)
6. Ubaidillah, **Gigih Priyandoko**, Muhammad Nizam, Iwan Yahya, Modeling of Magneto-rheological Damper using Back Propagation Neural Network, *Applied Mechanics and Materials*, Vol. 896, pp. 396-400, 2014. (Scopus index)

2013

7. **Gigih Priyandoko** and M.Z. Baharom, PSO-Optimized Adaptive Neuro-Fuzzy System for Magneto-rheological Damper Modelling. *International Journal of Applied Electromagnetics and Mechanics* 41 (2013) 301–312 (Impact Factor: 0.328, ISI)
8. Baharom, M.Z, Nuawi, M.Z, **Priyandoko, G**, Harris, S.M, and Omar, M.Z. Electromagnetic Braking Using Eddy Current Resistance for Stationary Exercise Bike, *Advanced Science Letters*, Volume 19, Number 11, November 2013 , pp. 3143-3147(5) (Impact Factor: 1.253, Scopus Index)

2012

9. Baharom, M. Z. Nuawi, M. Z. **Priyandoko, G.** Eddy current braking experiment using brake disc from aluminium series of A16061 and A17075, 1st International Conference on Mechanical Engineering Research (ICMER) Location: Kuantan, MALAYSIA, December 05-07, 2012, Book Series: IOP Conference Series-Materials Science and Engineering Volume: 36 Article Number: 012005 Published: 2012 (ISI).
10. M.Z. Baharom , M.Z. Nuawi, **G. Priyandoko** and S.M. Haris, Electromagnetic Braking System Using Eddy Current for Brake Disc of Al6061 and Al7075, *International Review of Mechanical Engineering (IREME)*, 6(3): 588-592; 2012 (Impact Factor: 0.191, Scopus index)

2011

11. M.Z. Baharom, M.Z. Nuawi, S.M. Haris and **G. Priyandoko**, Braking Torque Analysis On Electromagnetic Braking Study Using Eddy Current For Brake Disc Of Al6061 And Al7075, *Applied Mechanics and Materials*, (Scopus index)

2010

12. M. Mailah, **Gigih Priyandoko**, Mechatronic Implementation of An Intelligent Active Force Control Scheme via A Hardware-in the-loop Configuration, *International Review of Mechanical Engineering (IREME)*, 4(7), 899-907, November 2010. (Impact Factor: 0.191, Scopus index)

2009

13. M. Mailah, H. Jahanabadi, MZ. M. Zain, and **G. Priyandoko**. (2009). Modelling and Control of a Human-like Arm Incorporating Muscle Models. *Proc. IMechE Part C: J. Mechanical Engineering Science*. Vol. 223: 1569-1577. (Impact Factor: 0.473, ISI)
14. **Priyandoko, G.**, Mailah, M. and Jamaluddin, H. (2009). Vehicle Active Suspension System using Skyhook Adaptive Neuro Active Force Control. *Mechanical Systems and Signal Processing*. 23: 855-868. (Impact Factor: 2.88, ISI)

2005-2008

15. Mailah, M. and **Priyandoko, G.** (2007). Simulation of a Suspension System with Adaptive Fuzzy Active Force Control. *International Journal of Simulation Modelling*. 6(1): 25-36. (Impact Factor: 0.94, Scopus index)
16. Zain, M. Z. M., **Priyandoko, G.** and Mailah, M. (2008). Hybrid Control Scheme Incorporating AFC and Input Shaping Technique for a Suspension System. *Jurnal Mekanikal*. UTM. December. 27: 91-104.
17. **Priyandoko, G.** and Mailah, M. (2005). Controller Design for an Active Suspension of a Quarter Car Model Using Fuzzy Logic Active Force Control. *Jurnal Ilmiah Teknik Mesin. Universitas Trisakti, Indonesia*. June: 45-52.

CONFERENCE

2014

1. Mohd Azraai Razman, **Gigih Priyandoko**, Ahmad Razlan Yusoff, Bouc-Wen Model Parameter Identification for a MR Fluid Damper using PSO, *International Conference on Automotive Innovation and Green Energy Vehicle (AIGEV2014)*, Kuantan, Malaysia, August 26 - 27, 2014.
2. Mohd Fairusham Ghazali, **Gigih Priyandoko**, Wan Sofian Wan Hamat, Tan Wan Ching, Plastic Pipe Crack Detection Using Ultrasonic Guided Wave Method, *Malaysian Technical Universities Conference on Engineering and Technology MUCET2014*, Malacca, Malaysia, 10-11 November 2014.
3. Nur Cholis, Sugeng Ariyono, **Gigih Priyandoko**, Design of Single Acting Pulley Actuator (SAPA) Continuously Variable Transmission (CVT), *2nd International Conference on Sustainable Energy Engineering and Application*, Bandung, Indonesia, 14 – 15 October 2014.

2013

4. Mohd Azraai Razman, **Gigih Priyandoko**, Ahmad Razlan Yusoff, Bouc-Wen Model parameter Identification for a MR Fluid Damper using PSO, *International Manufacturing Engineering Conference (IMEC2013)*, Kuantan, Malaysia, 1-3 July 2013.
5. **Gigih Priyandoko**, Mohd Syakirin Ramli, Musa Mailah, Modelling of MR Damper with Adaptive Neural Network and Particle Swarm Optimisation Technique, *13th International Conference on Robotics, Control and Manufacturing Technology (ROCOM'13)*, Kuala Lumpur, Malaysia, April 2-4, 2013.

2012

6. M.Z.Baharom, M.Z.Nuawi, M.S.Salleh, **G.Priyandoko**, C.K.E.Nizwan, Air-gap Effect on Single Axis Vibration Analysis of Electromagnetic Braking Using Eddy Current, *4th International Conference on Noise, Vibration and Comfort NVC 2012*, Kuala Lumpur, Malaysia, November 26-28, 2012
7. Ahmad Razlan Yusoff, Muhammad Hatifi Mansor and **Gigih Priyandoko**, Effect on Frequency Response Functions of Cutting Tool for Chatter Stability Prediction, *The International Conference on Production, Energy and Reliability (ICPER2012)*, Kuala Lumpur, 12-14 June 2012.

2011

8. M.Z.Baharom, M.Z.Nuawi, S.M.Haris and **G.Priyandoko**, Braking Torque Analysis On Electromagnetic Braking Study Using Eddy Current For Brake Disc Of Al6061 And Al7075, *Regional Conference on Automotive Research (ReCAR)*, Kuala Lumpur, 14-15 December, 2011
9. Yahaya M. Sam , Rozaimi G. , **Gigih P.** , Norhazimi H. , Rafidah N. , Nur Farahana M.S., Proportional-Integral Sliding Mode Control of a Quarter Car Active Suspension System, *3rd International Conference on Advances in Computing, Control, and Telecommunication Technologies*, Jakarta, Indonesia, 13-14 December, 2011.

10. **Gigih Priyandoko**, Ahmad Razlan Yusoff, Muhammad Hatifi Mansor, Modeling of Magneto-rheological Damper using Adaptive Neural Network, *Proceeding of the 8th Saudi Engineering Conference (SEC8)*, Buraydah, Saudi Arabia, 6-7 December, 2011.
11. **Gigih Priyandoko**, Muhammad Hatifi mansor, Muhamad Imran Mohmad Sairaji, Modeling of Magneto-rheological Damper using Artificial Intelligent Method, *ICMER2011*, Kuantan, 5-6 December 2011.
12. M.Z.Baharom, M.Z.Nuawi, **G.Priyandoko** and S.M.Haris, Eddy current braking experiment using brake disc from aluminium series of Al6061 and Al7075, *ICMER2011*, Kuantan, 5-6 December 2011.
13. **Gigih Priyandoko**, Muhamad Imran Mohmad Sairaji, A Quarter Car Active Suspension System using State Feedback Controller, *Malaysian Technical Universities International Conference on Engineering & Technology (MUICET 2011)*, Batu Pahat, 14-15 November 2011.
14. M.Z.Baharom, M.Z.Nuawi, **G.Priyandoko**, S.M.Harris and L.M. Siow, Eddy Current Braking Study for Brake Disc of Aluminium, Copper and Zink, *Regional Engineering Postgraduate Conference*, UKM, Bangi, 2011

2010

15. **Gigih Priyandoko**, Sugeng Ariyono and Zamri Mohamed, PID State Feedback Controller of a Quarter Car Active Suspension System, *International Conference on Design, Production and Control Engineering*, October 27-29, 2010. Paris.
16. **Gigih Priyandoko**, Yahaya Md. Sam, Sugeng Ariyono, Agung Sudrajat, Zamri Mohamed, Nik Mohd Izual Nik Ibrahim, Adaptive Sliding Mode Control of a Quarter Car Model, *3rd Regional Conference on Noise, Vibration and Comfort (NVC) 2010*, 28-30th June, 2010, Putrajaya.
17. **Gigih Priyandoko**, Sugeng Ariyono, Agung Sudrajat, Zamri Mohamed, Nik Mohd Izual Nik Ibrahim, Modified Skyhook Controller for Semi-active Suspension System, *Proceedings of EnCon2010 3rd Engineering Conference on Advancement in Mechanical and Manufacturing for Sustainable Environment*, April 14-16, 2010, Kuching, Sarawak

2005-2009

18. Rozaimi Ghazali, Yahaya Md. Sam, **Gigih Priyandoko**, Norhayati M. Suaib, Norhazimi Hamzah. (2009). Modeling and Position Tracking Control of Hydraulic System based on System Identification Technique. *Conference on Instrumentation and Mechatronics 2009 (CIM09)*. June 2-3. Malacca.
19. **Priyandoko, G.**, Mailah, M. and Jamaluddin, H. (2008). Practical Implementation of Skyhook and Adaptive Active Force Control to an Automotive Suspension System. *2nd Regional Conference on Vehicle Engineering and Technology 2008 (RIVET 2008)*. 15-17 July. Kuala Lumpur.
20. **Gigih Priyandoko**, Sugeng Ariyono, Bambang Supriyo, Kamarul Baharin Tawi, Mohd. Zarhamdy Md. Zain. (2008). Performance of CVT Electro-Mechanical Clutch using PID Controller. *2nd Regional Conference on Vehicle Engineering and Technology 2008 (RIVET 2008)*. 15-17 July. Kuala Lumpur.
21. **Priyandoko, G.**, Mailah, M. and Jamaluddin, H. (2007). Skyhook Adaptive Neuro Active Force Control for a Suspension System. *1st International Conference on Instrumentation and Mechatronics (CIM07)*. May 28-29. Johor Bahru.
22. Zain, M. Z. M., **Priyandoko, G.** and Mailah, M. (2007). Hybrid Control Scheme Incorporating AFC and Input Shaping Technique for a Suspension System. *Seminar on Intelligent Technology and Its Applications (SITIA 2007)*. 12-15 May. ITS, Surabaya, Indonesia.
23. **Priyandoko, G.**, Mailah, M. and Jamaluddin, H. (2006). Particle Swarm Optimization Neural Network Based Modeling of Vehicle Suspension System. *1st Regional Postgraduate Conference on Engineering and Sciences (RPCES)*. 26-27 July. UTM, Johor Bahru.
24. **Priyandoko, G.** and Mailah, M. (2005). Fuzzy-Neuro Active Force Control of a Quarter Car Suspension System. *International Conference on Robotics, Vision, Information and Signal Processing (ROVISIP)*. 20-22 July. Penang, Malaysia.
25. **Priyandoko, G.** and Mailah, M. (2005). Controller Design for an Active Suspension of a Quarter Car Model Using Fuzzy Logic Iterative Learning Active Force Control. *Seminar on Intelligent Technology and Its Applications (SITIA 2005)*. ITS, Surabaya, Indonesia. 2-3 May.

26. **Priyandoko, G.** and Mailah, M. (2005). Controller Design for an Active Suspension of a Quarter Car Model Using Fuzzy Logic Active Force Control. *The 2nd International Conference on Mechatronics-2005 (ICOM'05)*. 10-12 May. Kuala Lumpur, Malaysia.

Award

1. Invention on electromagnetic Power Steering System, *Creation, Innovation, Technology and Research Exposition (CITREX 2014)*, Universiti Malaysia Pahang, 5-6 March, 2014 (Bronze Medal).
2. Automated Domestic Power Saver, *Creation, Innovation, Technology and Research Exposition (CITREX 2011)*, Universiti Malaysia Pahang, 13-14 April, 2011 (Bronze Medal).
3. Development of Magneto Rheological Damper, *Creation, Innovation, Technology and Research Exposition (CITREX 2011)*, Universiti Malaysia Pahang, 13-14 April, 2011 (Bronze Medal).

List of Course / Workshop

1. Arduino Introduction Training, Dewan Peperiksaan Mekanikal, FKM, UMP, 28-29 November 2013.
2. Signal Analysis Workshop, Dewan Peperiksaan Mekanikal, FKM, UMP, 03 – 04 July 2012
3. Bengkel Penyediaan Soalan Peperiksaan Akhir Berasaskan Bloom Taxonomy dan OBE, Vistana Hotel, Kuantan, 20-21 October 2012
4. Bengkel Dokumentasi Laporan EAC, The Zenith Hotel, Kuantan, 22 December 2012
5. Outcomes Based Curriculum Design and Constructively Aligned Teaching and Learning Activities Workshop, UMP Pekan, 2-4 July 2011
6. Programmable Logic Controller (PLC – OMRON SYSMAC C200HE), UMP Pekan, 29-30 June 2011
7. Short course operation management and optimization: Multi-objective Genetic Algorithm Approach, UMP, 11-13 December 2010.
8. Workshop CQI, OBE and Vetting session (final exam question), Kuantan, 23-24 June 2010
9. Workshop CQI, OBE and Vetting session (final exam question), UMP Pekan, 9-10 January 2010
10. Team Building FKM Staff, Rompin, Pahang, 12-13 December 2009
11. Introduction and Awareness Training ISO 9001:2008, UMP Pekan, 22-23 December 2009
12. Workshop CQI, OBE and Vetting session (final exam question), UMP Gambang, 28 August 2009
13. MATLAB AND SIMULINK Day, Sheraton Hotel, Subang, Kuala Lumpur, 17-18 June 2009
14. Intelligent System and Soft Computing Using Matlab, Kuala Lumpur, Malaysia, 2-3 December 2004.
15. Teaching Improvement Workshop (TIW), Bandung, 10 February - 2 March 2000.