Dr. Mohamad Heerwan Bin Peeie
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H-index : 0, Total citation : 0

Academic Qualification

1. Ph.D (Science and Technology), Tokai University, Japan 2015
2. M. Eng (Mechanical Engineering), Tokai University, Japan 2012
3. B.Eng (Prime Mover Engineering), Tokai University, Japan 2010

Brief Profile

Dr. Mohamad Heerwan Bin Peeie is a senior lecturer currently working at the Faculty of Mechanical Engineering, Universiti Malaysia Pahang since May 2015. He received his B.Eng, M.Eng and Ph.D from the Tokai University, Japan in 2010, 2012 and 2015 respectively. His research interests are in the areas of vehicle dynamics, safety and stability control of the vehicle.

Working Experiences / Appointment

1. May 2015 – Present : Senior Lecturer, Faculty of Mechanical Engineering, Universiti Malaysia Pahang.

Expert Area

Vehicle dynamics, Brake system, Intelligent control

Research Interest

Braking system of the vehicle (anti-lock brake system, regenerative brake system, hydraulic brake system, hydraulic-mechanical hybrid brake system).
Yaw stability control.

Research Project / Grant

1. Internal Grant (Seed Money) : RDU151104 : Project Leader : Skid Control of Electric Vehicle with Anti-Lock Brake System and Regenerative Brake System
2. External Grant (RAGS) : RDU151403 - Development of Regenerative Brake Timing Control to Improve the Braking Performance of Small Electric Vehicle
3. Internal Grant (AEC) : RDU160312 : Project Leader : Investigation on Differential Braking Torque Controller to Improve the Stability of Small In-wheel Electric Vehicle

Professional Qualification / Membership / Affiliation / Experience

Associate member of the Institution of Mechanical Engineers (Member No : 80297373)

Teaching Experience

2011-2013 : Teaching Assistant for Dynamics (Tokai University, Japan)
2015 : Applied Thermodynamics, Dynamics, Thermodynamics Laboratory
2016 : Dynamics, Automotive Engineering

Post Graduate Supervision

Degree / Final Year Supervision

1. MH12061 Mohamad Azelin Bin Aseli (Development of Automatic Electric Braking System to Improve Vehicle Safety)
2. MH12039 Mohamad Azmilhisyam Bin Ab Rahman (Development of Antilock Braking System to Improve the Braking Performance of Electric Vehicle)
3. MH12023 Nazmi Bin Mohd Ali (Development of Regenerative Braking Control to Prevent Vehicle from Skidding)
4. MH12043 Mohamad Aliff Ashraf Bin Che Roja (Development of Direct Yaw Moment Control to Increase the Stability of the Vehicle)

List of Publications

Journal:

1. **Mohamad Heerwan Bin Peeie**, H.Ogino. Y.Yamamoto, Skid Control of Small Electric Vehicle with In-wheel Motors (Effect of ABS and Regenerative Brake Timing Control on Emergency Braking), Applied Mechanics and Materials, vol. 789-790, pp. 927-931, Sept 2015.
2. **Mohamad Heerwan Bin Peeie**, H.Ogino. Y.Oshinoya, Skid Control of Small Electric Vehicle with Hydraulic-Mechanical Hybrid Brake System, Mechanical Engineering Journal, The Japan Society of Mechanical Engineers (JSME), vol. 11, No. 5, pp. 1-15, Oct 2014.
3. **Mohamad Heerwan Bin Peeie**, H.Ogino. Y.Oshinoya, Skid Control of a Small Electric Vehicle with Two In-Wheel Motors: Simulation Model of ABS and Regenerative Brake Control, International Journal of Crashworthiness, 2016.

Letters

1. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicles (Direct Yaw Moment Control using Tire Steer Angle), School of Engineering, Tokai University Bulletin, Series E, Vol 39, pp 73-80, 2014.
2. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid control of small electric vehicle with hybrid brake system (Effect of ABS and Regenerative Brake on Turning Motion), School of Engineering, Tokai University Bulletin, Series E, Vol 37, pp 35-41, 2012.

Proceedings

1. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Research on Skid Control of the Small Electric Vehicle (Experiment on the Motor Control), Proceedings of the JSME Annual Congress Meeting, Tokyo, 2014.
2. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle (Effect of the Tire Rigidness to the Brake Performance), Proceedings of the Electric Vehicle and Technology Conference, Yokohama, 2014.
3. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle (Effect of the Regenerative Braking Force to the Hysteresis of Friction Braking Force), Proceedings of the 2013 IEEE Conference on System, Process and Control, Kuala Lumpur, 2013.
4. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle with Hybrid Brake System (Effect of the PID Controller to the Brake Performance), Proceedings of the 2013 JSAE Annual Congress, Tokyo, 2013.
5. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle with Hydraulic-Mechanical Hybrid Brake System, Proceedings of the MJJIS-JUC Joint International Symposium 2013, Kanagawa, 2013.
6. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle with Hybrid Brake System (Effect of the P, PI and PD Controller), Proceedings of the 21th Transportation and Logistics JSME Conference 2012, Tokyo, 2012.
7. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Skid Control of Small Electric Vehicle with Hybrid Brake System (Effect of Regenerative Brake on Turning Motion), Proceedings of the International Conference on Applications and Design in Mechanical Engineering, Penang, 2012.
8. **Mohamad Heerwan Bin Peeie**, Hirohiko Ogino, Yasuo Oshinoya**,** Research on Skid Control of Small Electric Vehicle with Hydraulic-Mechnailca Hybrid Brake System (Effect of Rollimg Characteristics), Proceedings of the International Conference on Sustainable Mobility 2010, Malaysia.

List of Books

List of Consultancy

List of Research / Project

1. Development of Regenerative Brake Timing Control to Improve the Braking Performance of Small Electric Vehicle.
2. Development of Direct Yaw Moment Control by using PID Controller to Improve the Stability of Small Electric Vehicle

Awards / Research / Achievements

1. The best oral presentation in Mechanical, Industrial and Manufacturing Technologies Conference, 2015.
2. “Graduate on Time (GOT)”, Universiti Malaysia Pahang, 2015

Patents

List of Course / Conference Attended

1. AutoDesk Certified Professional : AutoCad 2015.