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# **PUBLICATIONS**

### **International Journal**

- 1. Benin Pratap Chandran, A. Immanuel Selvakumar, G. Shine Let, S. Paul Sathiyan, "Optimal model parameter estimation of solar and fuel cells using improved estimation of distribution algorithm", Ain Shams Engineering Journal, 2020, (Article In Press) https://www.sciencedirect.com/science/article/pii/S2090447920302288.
- 2. S. Paul Sathiyan, Cherian, M., C. Benin Pratap, "Neural network-based vehicle longitudinal controller design and validation using hardware in loop testing", International Journal of Scientific and Technology Research, 2020, 9(3), pp. 7109-7114.
- 1. S. Paul Sathiyan, C. Benin Pratap, Daniel, Arun, "Assessment of BLDC drive for E-bike application", International Journal of Innovative Technology and Exploring Engineering, 2019, Vol. 8, No. 11,2019, pp894-898
- 2. S. Paul Sathiyan, Daniel, C. Benin Pratap, "Effective Design and Analysis of Pedelec E-Bike using MBD Approach", Journal of Mechanical Engineering and Technology (IJMET), Vol. 9, No. 13, Dec 2018, pp 568–577.
- 3. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar "Safety Assessment of Vehicles with Ensemble FLC Based FCAS", Journal of Engineering Technology (IJET), Vol. 8, No. 4, Aug-Sep 2016, pp 17119-1727.
- 4. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar "Particle Swarm Optimization technique for rule base optimization of FLC for Low speed ACC vehicle", ARPN Journal of Engineering and Applied Sciences (ARPN), Vol. 9, No. 6, June 2014, pp 981-987.
- 5. S. Paul Sathiyan, Dr. S. Suresh Kumar, Dr. A. Immanuel Selvakumar " **Segmented fuzzy logic controller for vehicle following with optimized rule base**", Journal of Theoretical and Applied Information Technology (JATIT), Vol. 57, No. 1, pp 7-15.
- 6. Hannah Monica Anoop and S. Paul Sathiyan, "Modelling and Simulation of Modified Flyback Converter for HID Lamp", International Journal of Engineering and Advanced Technology (IJEAT), Vol. 3, No. 3, Feb 2014, pp 1-5.
- 7. S. Paul Sathiyan, Dr. S. Suresh Kumar, Dr. A. Immanuel Selvakumar "A Comprehensive review on Cruise Control for Intelligent Vehicles" International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 2, No. 5, April 2013, pp 89-96.
- 8. S. Ramsankar, S. Paul Sathiyan"Optimized control technique for Power Window in smart car

- **using H infinite filter**" International Journal of Recent Technology and Engineering (IJRTE), Vol.1, No. 1, April 2012, pp 59-64.
- 9. Merry Cherian, S. Paul Sathiyan "Neural Network based ACC for Optimized Safety and Comfort" International Journal of Computer Applications (IJCA), Vol. 42, No. 14, March 2012, pp 1-6.
- 10. S. Paul Sathiyan, A. Wisemin, Dr. S. Suresh Kumar "Optimization of ACC using Soft Computing Technique" International Journal of Computer Science and Information Security (IJCSIS), Vol. 9, No. 2, February 2011, pp 150-154.

### **National Journal**

1. Published paper titled "Soft Computing Based Adaptive Cruise Control", Indian Journal of Computer Science and Engineering, Vol. 2 No. 1 Feb2011. pp 68-76

#### **Book Chapters**

- S. Paul Sathiyan, Dr. S. Suresh Kumar, Dr. A. Immanuel Selvakumar "Optimized Fuzzy Logic based Adaptive Cruise Control Vehicle for Urban and Highway driving Patterns" Emerging Research in Computing, Information, Communication and Applications, Springer Science+Business Media Singapore 2016. ISBN 978-981-10-0286-1, d.o.i: 10.1007/978-981-10-0287-8
- S. Paul Sathiyan, Dr. S. Suresh Kumar, Dr. A. Immanuel Selvakumar "Novel HBM Spacing Policy for Fuzzy Based Forward Collision Avoidance System in Vehicle" Emerging Research in Computing, Information, Communication and Applications, Springer Springer Nature Singapore Pte Ltd, 2018. ISBN 978-981-10-4740-4, <a href="https://doi.org/10.1007/978-981-10-4741-1\_21">https://doi.org/10.1007/978-981-10-4741-1\_21</a>

## **International Conference**

- 1. S. Paul Sathiyan, Jennifer, K.S.G., Swathi, S., Sharmini, G.M., "Blood group determination and classification using Raspberry Pi3", AIP Conference Proceedings, 2020, 2222, 030002
- 2. Daniel, C., Hemalatha, G., Paul Sathiyan, S., Tensing, D., SundarManoharan, S., "System Identification of Magnetorheological Damper for Various Configurations", IOP Conference Series: Materials Science and Engineering, 2019, 561(1), 012028
- 3. Daniel, Arun, Arun, Paul Sathiyan, published a paper titled, "Experimental Analysis of BLDC Drive for E-Bike Application", at the I International Conference on Contemporary Engineering and Technology 2019 (ICCET -2019) at Prince Shri VenkateshwaraPadmavathy Engineering College, Chennai on 9<sup>th</sup> and 10<sup>th</sup> of March 2019.
- 4. Gideon Raja. P, Paul Sathiyan. S, Joys Evangelin R, Magdelene B, published a paper titled, "AC Exhaust Air Wind Energy Harvesting using WCDT System", at the International Conference on Innovations in Power and Advanced Computing Technologies (ICEES -2018) at SSN College of Engineering, Chennai on 07<sup>th</sup> 9<sup>th</sup> Feb 2018.
- 5. Midhya Mathew, S. Paul Sathiyan, published a paper titled, "Integrated Single Stage Standalone Solar PV Inverter", at the International Conference on Innovations in Power and Advanced Computing Technologies (i-PACT2017) at Vellore Institute of Technology, Chennai on 21st and

- 22nd April 2017.
- 6. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar, published a paper titled, "Novel HBM Spacing Policy for Fuzzy Based Forward Collision Avoidance System in Vehicle", at the International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA), 2016 at NITTEE Meenakshi Institute of Technology, Bangalore on 29th and 30th July 2016.
- 7. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar, published a paper titled, "Novel HBM Spacing Policy for Fuzzy Based Forward Collision Avoidance System in Vehicle", at the International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA), 2016 at NITTEE Meenakshi Institute of Technology, Bangalore on 29th and 30th July 2016.
- 8. Midhya Mathew, S. Paul Sathiyan, published a paper titled, "Design Optimization of Aalborg Inverter for Solar PV Applications", at the International Conference on Innovations in information Embedded and Communication Systems (ICCIIECS), 2016 at Karpagam College of Engineering, Coimbatore on 17th March 2016.
- 9. V. Alice Sugunabai, S. Paul Sathiyan, published a paper titled, "Integrated Dual Mode Control Technique for Torque Improvement in PMSM drive for EV/HEV Application", at the International Conference on Innovations in information Embedded and Communication Systems (ICCIIECS), 2016 at Karpagam College of Engineering, Coimbatore on 17th March 2016.
- 10. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar, published a paper titled, "Optimised Fuzzy Logic based Adaptive Cruise vehicle for Urban and Highway driving Pattern", at the International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA), 2015 at NITTEE Meenakshi Institute of Technology, Bangalore on 31st July and 1st of August 2015.
- 11. S. Paul Sathiyan, S. Suresh Kumar, A. Immanuel Selvakumar, published a paper titled, "Optimised fuzzy controller for improved comfort level during transitions in Cruise and Adaptive Cruise Control Vehicles" at the International Conference on Signal Processing And Communication Engineering Systems (SPACES), 2015 at KL University, Guntur on 2-3 Jan. 2015, pp86-91.
- 12. Sharon P and S. Paul Sathiyan published a paper titled, "Design and Simulation of Bidirectional Converter with Flyback and Capacitor Diode Snubbers" at the International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS), 2015 organised by Karpagam College of Engineering, Coimbatore on 19th and 20th March 2015, pp 14-18.
- 13. Antony S and S. Paul Sathiyan published a paper titled, "Design and Simulation of Boost Converter with Input Ripple Cancellation Network" at the IEEE International Conference on Electrical, Computer and Communication Technologies (SPACES), 2012 at SVS College of Engineering, Kollam, during 5th 7th of March 2015.
- 14. Chinchu Mary Chacko and S. Paul Sathiyan, published a paper titled, "Soft SwitchedAuxiliary Resonant Circuit Based Boost Converter With Reduced Stress Using ZVT PWM" at the IEEE International Conference on Electrical, Computer and Communication Technologies (SPACES), 2012 at SVS College of Engineering, Kollam, during 5th 7th of March 2015.
- 15. Merry Cherian and S. Paul Sathiyan, published a paper titled, "Optimization of Adaptive Cruise Control Using Neural Network" at the Second International Conference on Emerging Trends in Advanced Engineering Research (SPACES), 2012 at Baselios Mathews II College of Engineering,

- Kollam, during 20th& 21st of February 2012.
- 16. Ram Shankar. S and S. Paul Sathiyan, published a paper titled, "Optimized Control Technique for Power Window in Smart Car using H infinite Filter" at the Second International Conference on Emerging Trends in Advanced Engineering Research (SPACES), 2012 at Baselios Mathews II College of Engineering, Kollam, during 20th& 21st of February 2012.

#### **National Conferences**

- S. Paul Sathiyan published a paper titled, "Control and Analysis of an Integrated Charge for Plug-in Hybrid Electric Vehicle Applications" at the National Electric Power and Energy Conversion Conference (NEPECC'14) atKarunya University, Coimbatore on 3<sup>rd</sup> and 4<sup>th</sup> April 2014
- 2. Published paper titled "Fuzzy based low speed ACC", National Conference on Recent Trends in Power Electronics and Drives, Christian College of Engineering and Technology, Ottanchathiram, India. 22<sup>nd</sup> March 2011. pp 1-4
- 3. Published paper titled "Wireless Technology in Measurements and Instrumentation" National Conference on Advanced Techniques in Instrumentation, Control & Communication Engineering, St. Peters Engineering College, Chennai, India. 24<sup>th</sup> & 25<sup>th</sup> January 2008. pp 63-66.
- 4. S. Paul Sathiyan presented a Paper titled "**Speed Control of Single Phase Induction motor using v/f technique**" at "National Conference on Innovative Strategies on Power Systems and Power Electronic Drives" held at Sona College of Engineering, Salem on 15<sup>th</sup> March 2007.
- 5. S. Paul Sathiyan presented a paper titled "Bidirectional v/f Control for Single Phase induction motor using Microcontroller", at "National Conference on Innovations Communication and Computing" held at SNS College of Engineering, Coimbatore on January 2007.