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| ▼ الاسم المستخدم في نشر البحوث حسب الكوكل سكولر  * 1. Ibraheem Kasim Ibraheem |

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| ▼ الاتجاهات البحثية  * Robotics, Nonlinear control, Machine learning, system identification, power control |

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| ▼ الدرجة العلمية Professor |
| ▼ الأبحاث المنشورة PUBLICATIONS   1. Ibraheem K. Ibraheem, “**A Digital-Based Optimal AVR Design of Synchronous Generator Exciter using LQR Technique**”, Al-Khwarizmi Engineering Journal, ISSN: 1818-1171, Vol. 7, No. 1, March 2011. 2. Ibraheem K. Ibraheem, “**Robust Governor Design for Hydro machines using H∞ Loop-Shaping Techniques”**, 6th Engineering Conference / College of Engineering / University of Baghdad / Baghdad-Iraq, V. 4, pp. 403-414, 5-7 April 2009. 3. Firas Mohammed Tuaimah, Ibraheem K. Ibraheem, , “**Robust H∞ Controller Design for Hydro Turbines Governor**”, The 2nd Regional Conference for Engineering Sciences / College of Engineering / Al-Nahrain University, Part1, 75-84, 1-2/ 12 / 2010. 4. Ibraheem K. Ibraheem, Ghsun A. Ibraheem , “ **Motion Control of An Autonomous Mobile Robot using Modified Particle Swarm Optimization based Fractional Order PID Controller**”, Journal of Engineering and Technology / University of Technology , Vol. 34, No. 13, Part (A), 2016. 5. 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Ibraheem, “**Noise Detection and Estimation Using Discrete Wavelet Transform**”, the association for the Advancement of Modeling and Simulation Techniques in Enterprises (A.M.S.E). AMSE periodical / Signal Processing and Pattern Recognition series / Advances in modeling / series-B, Vol. 48 nº 5, France, 2005. 14. W.A. Mahmoud; I.K. Ibraheem, “**Denoising of a Non-Guassian and Film Grain Noise using Wavelet Transform**” at the association for the Advancement of Modeling and Simulation Techniques in Enterprises (A.M.S.E), AMSE periodical / Signal Processing and Pattern Recognition series / Advances in modeling / series-B, Vol. 48 nº 4, France, 2005. 15. Ibraheem K. Ibraheem, “**A Digital-Based Optimal AVR Design of Synchronous Generator Exciter using LQR Technique**”, Al-Khwarizmi Engineering Journal, ISSN: 1818-1171, Vol. 7, No. 1, March 2011. 16. Ismail A Mohammed, Rami A. Mahir, Ibraheem K. 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Humaidi,](https://ieeexplore.ieee.org/author/37086123299) [Kadhim Yakoob Yousif,](https://ieeexplore.ieee.org/author/37086962201) [Akram Hashim Hameed,](https://ieeexplore.ieee.org/author/37086397507) [Ibraheem Kasim Ibraheem, “Optimal Robust Controller Design for Uncertain Linear Glucose System," 2019 6th International Conference on Control, Decision and Information Technologies (CoDIT), Paris, France, 2019, pp. 663-668.](https://ieeexplore.ieee.org/author/37086895754) doi**:** [10.1109/CoDIT.2019.8820570](https://doi.org/10.1109/CoDIT.2019.8820570). 43. Amjad J. Hmaidi, Ibraheem Kasim Ibraheem, “[Speed Control of Permanent Magnet DC Motor with Friction and Measurement Noise Using Novel Nonlinear Extended State Observer-Based Anti-Disturbance Control](javascript:void(0))**”**, Energies, vol. 12, no. 9, 2019. <https://doi.org/10.3390/en12091651>. 44. Wameedh Riyadh Abdul-Adheem, Ibraheem K. 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Humaidi, **Multi-objective path planning of an autonomous mobile robot using hybrid PSO-MFB optimization algorithm**, Applied Soft Computing, vol. 89, 106076, <https://doi.org/10.1016/j.asoc.2020.106076>. 47. W. R. Abdul-Adheem, I. K. Ibraheem, A. T. Azar, and A. J. Humaidi, **“Improved Active Disturbance Rejection-Based Decentralized Control for MIMO Nonlinear Systems: Comparison with The Decoupled Control Scheme**,” *Applied Sciences*, vol. 10, no. 7, p. 2515, Apr. 2020. <https://doi.org/10.3390/app10072515>. 48. F. H. Ajeil, I. K. Ibraheem, A. T. Azar, and A. J. Humaidi, **“Grid-Based Mobile Robot Path Planning Using Aging-Based Ant Colony Optimization Algorithm in Static and Dynamic Environments**,” *Sensors*, vol. 20, no. 7, p. 1880, Mar. 2020. <https://doi.org/10.3390/s20071880>. 49. 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Fatin Hassan Ajeil, Ibraheem Kasim Ibraheem, Ahmad Taher Azar, Amjad J Humaidi, [**Autonomous navigation and obstacle avoidance of an omnidirectional mobile robot using swarm optimization and sensors deployment**](https://journals.sagepub.com/doi/abs/10.1177/1729881420929498)**,** International Journal of Advanced Robotic Systems, vol. 17, Issue 3, 2020. 2. Wameedh Riyadh Abdul-Adheem, Ibraheem Kasim Ibraheem, Amjad J Humaidi, **Model-free active input–output feedback linearization of a single-link flexible joint manipulator: An improved active disturbance rejection control approach**, https://doi.org/10.1177/0020294020917171 . 3. Ghusn Abdul Redha Ibraheem, Ahmad Taher Azar, Ibraheem Kasim Ibraheem, Amjad J. Humaidi, "**A Novel Design of a Neural Network-Based Fractional PID Controller for Mobile Robots Using Hybridized Fruit Fly and Particle Swarm Optimization**", Complexity, vol. 2020, Article ID 3067024, 18 pages, 2020. <https://doi.org/10.1155/2020/3067024>. 4. 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| ▼ الكتب والمؤلفات  * Distributed Denial of Service attacks: Detection and Prevention, Lambert, 2016. * Robust Control for Load Frequency Control in Power systems: State-Space and Polynomial Techniques, Lambert, 2018. |

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| ▼ رسائل الماجستير الذي اشرف عليها  |  |  |  |  | | --- | --- | --- | --- | | **Year** | **Department** | **Thesis Title** | **No.** | | 2012 | Electrical Engineering | Load Forecasting Problem for Iraqi Super High Voltage Grid Based on using Optimization Techniques (master) | 1 | | 2011 | Computer  Engineering | Detecting and preventing distributed denial of service(DDOS) attack (master) | 2 | | 2011 | Computer  Engineering | The Multi-Constrained Dynamic Programming Problem in View of Routing Strategies in Wireless Mesh Networks (master) | 3 | | 2013 | Electrical Engineering | Routing in Wireless Networks using Evolutionary Multi-Objective Optimization Techniques | 4 | | 2014 | Electrical Engineering | Motion Control of an Autonomous Mobile Robot Using Swarm Optimization Based Fractional Order Controllers | 5 | | 2016 | Electrical Engineering | Development of Swarm Intelligence for Autonomous Navigation and Obstacle Avoidance of an Omnidirectional Mobile Robot | 6 | | 2017 | Electrical Engineering | Consensus Control of UAV Multi-Agent Systems | 7 | | 2019 | Electrical Engineering | Nonlinear Control of Sensorless Permanent Magnet Synchronous Motor with Disturbance Compensation Techniques | 8 | | 2020 | Electrical Engineering | Modeling and Nonlinear Control Design of Uncertain Systems with Anti- Disturbance Techniques | 9 | | | |
| ▼ اطاريح الدكتوراه الذي اشرف عليها  |  |  |  |  | | --- | --- | --- | --- | | 2014 | Electrical Engineering | Active Disturbance Rejection Control for Nonlinear MIMO Systems. | 1 | |