

Dr. Mohammad Dikko Aliyu

Professor

Personal Data:

Nationality | CANADIAN
Date of Hire | Sept. 2012
Date Rank Obtained | 2022
Department | Electrical Engineering
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Education:

| Academic Degree | Major | specialty | Place of Issue | Address | Date |
|------------------|-------|-------------------|---------------------------------|------------------------|------|
| Doctorate (PhD) | EE | Systems & Control | Louisiana State University, USA | Baton Rouge, LA, USA | 2002 |
| Masters (M.Sc.) | EE | Systems & Control | Louisiana State University, USA | Baton Rouge, LA, USA | 2001 |
| Bachelor (B.Sc.) | EE | General | Ahmad Bello University, Nigeria | Zaria, Kaduna, Nigeria | 1988 |

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

| | |
|--------|--|
| PhD | A Factorization Approach for Solving the Hamilton-Jacobi Bellman Equation in Nonlinear Optimal Control |
| Master | Efficient Algorithms for Collision Detection and Path Planning for Robotics Application |

Experiences:

| Title of Job | Address of Work | Country | Date | |
|--------------|--------------------------|---------|------|------|
| Asst. Prof. | Hail University | KSA | From | 2003 |
| | | | To | 2005 |
| Asst. Prof. | Hafr-Al-Batin University | KSA | From | 2005 |
| | | | To | 2006 |
| Asst. Prof. | King Faisal University | KSA | From | 2012 |
| | | | To | 2015 |

Research Interests:

1. Nonlinear and Optimal Control
2. Robust Control

3. Signal Processing
4. Robotics
5. Mathematical Physics

Publications:

| # | Name of author(s) | Title of Publication | Publisher and Date of Publication | Link of Publication |
|---|-------------------|---|--|----------------------------|
| 1 | M. D. S. Aliyu | Approximate Iterative Solutions of Hamilton-Jacobi Equations for Nonlinear Systems | IFAC J. Systems and Control, Vol. 14, 2020 | Click Here |
| 2 | M. D. S. Aliyu | An Improved Iterative Computational Approach to the Solution of the Hamilton-Jacobi Equation in Optimal Control, of Affine Nonlinear Systems with Application | Int. J. of Systems Science, vol. 51, No. 14, pp. 2625-2634, 2020 | Click Here |
| 3 | M. D. S. Aliyu | A New Hamilton-Jacobi Differential Game Framework for Nonlinear Estimation and Output Feedback” | Circuits, Systems and Signal Procc., vol. 39, pp. 1831-1852, 2020 | Click Here |
| 4 | M. D. S. Aliyu | A Hamiltonian Pertubation Approach to Construction of Geometric Integrators for Optimal Control Problems | International Journal of Applied and Computational Mathematics, Springer Verlag, vol.51, No. 5, 2019 | Click here |

Language Proficiency:

1. English
2. Arabic
3. French