Professor Amin Riad MAOUCHE
Associate Professor, Department of computer science,
Faculty of Science, Mhamed Bougara University of Boumerdes,
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Education

- **2010**   <u>**PhD**</u> **on Robotics**.
  Faculty of Electronics and Computer Science, University of Science and Technology Houari Boumediene, Algiers, Algeria.
  Thesis title: "*Vers une commande neuronale de robots flexibles*".
  Supervisor: Professor Mokhtar ATTARI.

- **1999**   <u>**Magister**</u> **on Robotics.**
  Faculty of Electronics and Computer Science, University of Science and Technology Houari Boumediene, Algiers, Algeria.
  Thesis title : " *Conception et mise en œuvre de lois de commande pour un robot flexible. Optimisation des performances* ".
  Supervisor : Professor Redouane TOUMI.

- **1995**   <u>**Master**</u> **on Process Control and Automation**.
  Faculty of Electronics and Computer Science, University of Science and Technology Houari Boumediene, Algiers, Algeria
  Thesis title: " *Matching Pursuit* "
  Supervisor: Professor Amina SERRIRE.

Employment & Teaching

➢ <u>Associate Professor: 2012-present</u>

Department of computer science, Faculty of science, Mhamed Bougara University of Boumerdes,

-        "Modeling, Simulation and Control of Linear systems"

-        "Graph theory"

-        "Methods of Optimization"

➢ <u>Assistant Professor: 2010-2012</u>

Department of computer science, Faculty of science, Mhamed Bougara University of Boumerdes,

-        "Artificial Intelligence"

-        "Graph theory"

-        "Introduction to Signal Theory"

➢ **Instructor: 2001-2010**

Department of computer science, Faculty of science, Mhamed Bougara University of Boumerdes,

- "Introduction to Automation and process control"
- "Introduction to Digital Electronics"
- "Introduction to Industrial network"
- "Tutorials on programming with C & Matlab"

➢ **Adjunct Instructor: 1999-2001**

Department of computer science, Faculty of science, Mhamed Bougara University of Boumerdes,

- "Introduction to Signal processing"
- "Tutorials on programming with Pascal"

Supervision

Department of computer science, Faculty of science, Mhamed Bougara University of Boumerdes:

2013-present – Phd   : MEDDAHI Hosna .

2013-present – Phd   : AKBIBOUCHE Mohamed.

2012-2013 – Master   : ABID Fatma and BOUKHORS.

2011-2012 – Master   : BELLIL Abdelmalek and KADI Abdenacer.

2010-2011 – Master   : DJEMIL Fatima Zohra and KEDDACHE Sabrina.

Scientific Activity

Research interest

➢ Modeling and control of rigid and flexible link manipulators.

➢ Nonlinear control, adaptive control, robust control.

➢ Artificial neural network modeling, support vector machine, fuzzy logic.

➢ Swarm intelligence, ant colony algorithm, particle swarm algorithm, bee colony algorithm.

Publications on peer reviewed journals

➢ **Maouche, A. R.**, Attari, M. (**2012**) : Adaptive cerebellar model articulation controller-nonlinear control system for flexible link manipulator. *Journal of Vibration and Control (JVC)* 19(14), 2109-2123, August 31. SAGE Publications, USA. ISSN: 1077-5463. eISSN: 1741 -2986. DOI: 10.1177/1077546312454319.

➢ **Maouche, A. R.**, Attari, M. (**2009**) : Hybrid adaptive neural control for flexible manipulators. *International Journal of Intelligent Systems Technologies and Applications (IJISTA)* 7(4), 396-413, September 3. Inderscience Ltd, Switzerland. ISSN: 1740-8865. DOI: 10.1504/IJISTA.2009.028055.

➢ **Maouche, A. R.**, Attari, M. (**2008**) : Neural network-based adaptive control of a two-link flexible manipulator. *The Mediterranean Journal of Measurement and Control (MEDJMC)* 4(2), 66-75, April. SoftMotor Ltd., United Kingdom. ISSN: 1743-9310.

Book chapter

- **Maouche, A. R.** (2010) : Intelligent Control. In: Casolo, F. (eds.) Motion Control, 31-50, January. In-Teh Publication, Croatia. ISBN 978-953-7619-55-8.

Conference proceedings

- Boukhenous, S., Attari, M., Kahla, A., **Maouche, A. R.** (**2012**) : Prototype motorisé pour la rééducation clinique de l'entorse de la cheville. *Biomedical Engineering International Conference 2012 (BIOMEIC'12),* October 10-11, Tlemcen, Algeria. ISSN: 2253-0886.

- **Maouche, A. R.**, Attari, M. (**2010**) : Nonlinear Adaptive RBFNN Control of a One-Link Flexible Manipulator. *IEEE 1st International Conference on Machine and Web Intelligence (ICMWI'2010),* 144-149, October 3-5, Algiers, Algeria. ISBN: 978-1-4244-8610-6, DOI: 10.1109/ICMWI.2010.5647944, IEEE Catalog Number: CFP1023L-CDR.

- **Maouche, A. R.**, Attari, M. (**2009**) : Adaptive nonlinear control of a one-link flexible manipulator. *3rd International Conference on Electrical Engineering (ICEE 2009),* 124-129, December 5-7, Boumerdes, Algeria.

- **Maouche, A. R.**, Attari, M. (**2009**) : CMAC based adaptive control of a flexible link manipulator. *IEEE 35th International Conference on Industrial Electronics CONtrol (IECON 2009),* 1480-1485, November 3-5, Porto, Portugal. ISBN: 978-1-4244-4648-3. DOI: 10.1109/IECON.2009.5414718.

- **Maouche, A. R.**, Attari, M. (**2008**) : Adaptive neural controller of a rotating flexible manipulator. *IEEE 19th International Symposium on Power Electronics, Electrical Drives, Automation & Motion (SPEEDAM 2008),* 517-522, June 11-13, Ischia, Italy. ISBN: 978-1-4244-1663-9. DOI: 10.1109/SPEEDHAM.2008.4581211.

- **Maouche, A. R.**, Attari, M. (**2007**) : Hybrid control strategy for flexible manipulators. *IEEE 17th International Symposium on Industrial Electronics (ISIE 2007)*, 50-55, June 4-7, Vigo, Spain. ISBN: 978-1-4244-0755-2. DOI: 10.1109/ISIE.2007.4374571.

- **Maouche, A. R.**, Toumi, R. (**1999**) : Hybrid control strategy for flexible manipulators. *Séminaire National sur l'automatique et les signaux (SNAS99),* 171-176, November 9-10, Annaba, Algeria.

Journal referee

- *IEEE Transaction on Industrial Electronics* – TIE. IEEE Inc, USA. ISSN: 0278-0046.

- *Journal of Vibration and Control* – JVC. SAGE Publications, USA. ISSN: 1077-5463. eISSN: 1741 -2986.

- *Journal of Intelligent and Robotic Systems* – JINT. Springer, Netherlands. ISSN Online: 1573-0409 - ISSN Print: 0921-0296.

- *Journal of Systems and Control Engineering* – JSCE. SAGE Publications, USA. ISSN: 0959-6518. eISSN: 2041-3041.

Technical program committee

- *2014 International Conference on Information Technology and Management Engineering - ITME2014.* April 26-27, Hong Kong, China.

- *IEEE 35th International Conference on Industrial Electronics CONtrol* – IECON 2009. IEEE-IES, November 3-5, Porto, Portugal. ISBN: 978-1-4244-4648-3.