

**Anas Fattouh**  
**Associate Professor of Automatic Control**

**EDUCATION**

- 1997-2000 Ph.D. in Automatic Control  
Automatic Laboratory of Grenoble, INPG, France  
"Robust observation and digital control for systems with time-delays"  
*A Canadian equivalence Certificate is obtained in 2015*
- 1996-1997 Diploma in Automatic Control  
Automatic Laboratory of Grenoble, INPG, France  
"Identification and command of multivariable systems"
- 1987-1992 BSc in Automatic Control and Industrial Electronics  
Aleppo University, Aleppo, Syria  
"Designing of an auto-vehicle driven by the microprocessor Z80"

**PROFESIONAL ACTIVITIES**

- 2009-present Associate Professor, King Abdul Aziz University, Jeddah, Saudi Arabia  
2008-2009 Associate Professor, Aleppo University, Aleppo, Syria  
2005-2008 Assistant Professor, Aleppo University, Aleppo, Syria  
2003-2005 ATER, University of Metz, France  
2002-2003 Post-Doctorate, Automatic Laboratory of Grenoble, INPG, France  
2000-2002 Lecturer, Aleppo University, Aleppo, Syria  
1994-1995 Assistant Lecturer, Aleppo University, Aleppo, Syria  
1992-1994 Engineer, Center of Studies and Scientific Researches, Aleppo, Syria

**TEACHING ACTIVITIES**

- Elementary Level Computer Skills (MS Windows 8.1 & MS Office 2013), Principles of Programming (Visual Basic), Introduction to Computing.
- Bachelor Level Applied Math for Computing (Numerical Analysis), Programming I (Java), Human Computer Interaction, Digital Control, Advanced Programming (Matlab).
- Master Level Mathematical Tools (Linear Algebra), Modern Control (Fuzzy Control), Advanced Computer Graphics.

**RESEARCH ACTIVITIES**

- Control Systems: Time-Delay Systems, Tele-Operated Systems.  
Robotics: Path Planning, Surveillance Robots, Robot Localization.  
Brain Computer Interface: Visual Evoked Potential.  
Human Computer/  
Machine Interaction: Eye Gaze Tracking, Powered Disabled Wheelchairs.

## **SKILLS**

- Programming Languages: C++, C#, Java, Visual Basic, Matlab, x86 Assembly Language.
- Scientific Software: MS Visual Studio, NetBeans, Matlab (Signal Processing, Image Processing, Instrument Control Toolbox, Parallel Toolbox, 3D Animation), Proteus ISIS (Microcontrollers Emulator), Emotiv EPOC (Brain Computer Interface), Rovio Software.
- Others: MS Office, Latex, Blackboard, MIT Scratch.

## **RECENT TRAINING AND CERTIFICATES**

- Creation of Educational Animations, 2015.
- Basics of E-Learning Management System (Blackboard), 2015.
- High Performance Computing, 2015.
- Academic Advising, 2014.
- NEUROSPEC AG: Combined NIRS and EEG, 2013.
- ABET Program Assessment Workshop, 2012.
- Several journal's papers reviewing certificates.

## **REFERENCES**

**Olivier SENAME**, Professor

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**Guy BOURHIS**, Professor

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**Fadi Fouz**, Professor

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## **OTHER INFORMATION**

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## PUBLICATIONS

### Books

#### **Advanced Software in Control Systems (2)**

Anas Fattouh

Book, Publisher: University of Aleppo, 2009

#### **Modern Control (1)**

Elias Toshan and Anas Fattouh

Book, Publisher: University of Aleppo, 2007

### Chapters of Books

#### **Robust $H_{\infty}$ Control of Bilateral Teleoperation Systems under Communication Time-Delay**

Olivier Senname and Anas Fattouh

Book Chapter in the book: Applications of Time Delay Systems.

Publisher: Springer – Verlag Berlin Heidelberg, 2007

#### **A Model Matching Solution of Robust Observer Design for Time-Delay Systems**

Anas Fattouh and Olivier Senname

Book Chapter in the book: Advances in Time Delay Systems.

Publisher: Springer – Verlag Berlin Heidelberg, 2004

### Recent Journals Papers

#### **Smartphone-based 3D Orientation Estimation for Virtually any Published PC Game**

Anas Fattouh

International Journal of Computer Trends and Technology (IJCTT), Vol. 31, Issue 2, pp. 70-73, 2016

#### **An Enhanced SSVEP BCI Application through Emotion: Preliminary Results**

Hadi Oqaibi and Anas Fattouh

International Journal of Innovative Research in Computer and Communication Engineering, Vol. 3, Issue 13, 2015

#### **A Non-Parametric Approach for Paper Currency Recognition**

Anas Fattouh

International Journal of Computer Science and Software Engineering, Vol. 4, Issue 5, pp. 121-125, 2015

#### **Emotional BCI Control of a Smart Wheelchair**

Anas Fattouh, Odile Horn and Guy Bourhis

International Journal of Computer Science Issues (<http://ijcsi.org>), Vol. 10, Issue 3, No. 1, May 2013, pp. 32-36 (<http://ijcsi.org/papers/IJCSI-10-3-1-32-36.pdf>)

#### **A Two-Stage Representation of Fuzzy Systems**

Anas Fattouh and Fadi Fouz

International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 [www.ijera.com](http://www.ijera.com)  
Vol. 2, Issue 3, May-Jun 2012, pp.2660-2665  
([http://www.ijera.com/papers/Vol2\\_issue3/QD2326602665.pdf](http://www.ijera.com/papers/Vol2_issue3/QD2326602665.pdf))

#### **Robust Coordinated Design of PSS and Excitation System using Genetic Algorithm to Enhance the Dynamic Stability of Al-Zara Thermal Power Station Generation in Syria**

Riad Al-Mustfa, Anas Fattouh and Wassan A. Hashim

Journal of King Abdulaziz University: Engineering Science, Vol. 23 No. 1, pp: 59-81, 2012

#### **Developing and Improving the Reservation System between Syrian Railway Stations using a Programmable Logical Controller (PLC) and a Supervisory Control And Data Acquisition (SCADA) System**

Salah Nader, Anas Fattouh and Ahed Al-Maranazy

Research Journal of Aleppo University, Vol. 83, 2010

## **Design and Implementation of a Self-Learning Open-Source Interactive Kit for Teaching Microcontroller Programming Based on Learning Methodologies**

Anas Fattouh, Imad Al-Rouh and Walid Balid  
Research Journal of Aleppo University, Vol. 75, 2009

## **Development of a Conversion Algorithm for Matlab-Based Controller to VHDL-Based Controller**

Elias Tochan, Anas Fattouh and Noor Ghandi  
Research Journal of Aleppo University, Vol. 69, 2009

### **Recent Conferences Papers**

#### **EEG-Based Emotion Recognition of Quran Listeners**

Anas Fattouh, Ibrahim Albidewi, Bader BATERFI  
3rd 2016 International Conference on "Computing for Sustainable Global Development", New Delhi, India, 2016

#### **Student Tracking Model using Mixed Reality**

Hassanin Al-Barhamtoshy, Anas Fattouh, George Tsaramirsis  
The 3rd International Conference on Mathematical Sciences and Computer Engineering, Langkawi, Malaysia, 2016

#### **Verification, Validation and Accreditation of the Modeling for the Electric Power Generation Stations in Syria: Application to "Aleppo and Al-Zara Thermal Power Stations"**

Riad Al-Mustfa, Anas Fattouh and Wassan A. Hashim  
In "2nd International Engineering Sciences Conference", Aleppo, Syria, May 24-26, 2011

#### **A Comparative Analysis of the Effect of the Power System Stabilizer on the Dynamic Stability of the Electric Power Generation Stations in Syria: Application to "Aleppo and Al-Zara Thermal Power Stations"**

Riad Al-Mustfa, Anas Fattouh and Wassan A. Hashim  
In "6th International Conference on Electrical Engineering", Batna – ALGERIA, October 11-13, 2010

#### **MATLAB-Based 3D Dynamic Model of a Powered Wheelchair**

Anas Fattouh, Yehya Dadam and D. T. Pham  
In "IPROMS Conference Innovative Production Machines and Systems", MEC, Cardiff University, Wales, UK, 2008

#### **Development of 3D Dynamic Model of a Powered Wheelchair**

Anas Fattouh and Salah Nader  
In "First Electrical and Electronic Conference", University of Aleppo, Aleppo, Syria, June 26-28, 2007

#### **Preliminary Results on Dynamic Obstacle Avoidance for Powered Wheelchairs**

Anas Fattouh and Salah Nader  
In "2nd IEEE International Conference on Information & Communication Technologies: Form Theory to Applications", Umayyad Place, Damascus, Syria, April 24-28, 2006

#### **Assisted Control for a Powered Wheelchair with a Force Feedback Joystick**

M'hamed Sahnoun, Anas Fattouh and Guy Bourhis  
In "8th European Conference for the Advancement of Assistive Technology in Europe", Henri Warembourg Faculty of Medicine, Lille, France, September 6-9, 2005