

# السيره الذاتية للدكتور علي عبدالله الروضان أستاذ مشارك في علم الحاسوب (التعلم الآلي و التنقيب عن البيانات)

- مدير مركز الحاسوب الجامعة الاردنية 9/2014 8/2016
- رئيس قسم تكنولوجيا معلومات الاعمال كلية الملك عبدالله الثاني لتكنولوجيا المعلومات 9\2013 9\2014.
- مندوب الجامعة الاردنية لعضوية اللجنة الفنية الاستشارية في شبكة الجامعات الاردنية 9\2014 - 9\2016.
  - ممثل كلية الملك عبدالله الثاني لتكنولوجيا المعلومات في مجلس الجامعة الاردنية 9\2014 - 9\2015.
  - عضو في العديد من لجان الاعتماد العام و الخاص في هيئة اعتماد مؤسسات التعليم العالى 9\2013 الان.
    - عضو لجنة متابعة موقع الجامعة الاردنية الالكتروني 9\2014 -9\2016.
  - عضو لجنة اصدار النشرة الالكترونية الشهرية لاخبار الجامعة الاردنية 9\2014 9\2016.
    - عضو اللجنة العليا للكتاب السنوي في الجامعة الاردنية 9/2014 -9/2016.
      - عضو لجنة حوسبة متطلبات الجامعة الاجبارية و الاختيارية 2015.
        - عضو اللجنة التحضيرية لملتقى خريجي الجامعة الاردنية 2015.
      - عضو مجلس كلية، قسم تكنو لو جيا معلو مات الاعمال 2013-2014 <u>.</u>
    - عضو لجنة الدكنوراة في علم الحاسوب كلية الملك عبدالله الثاني لتكنولوجيا المعلومات من 9\2013 9\2014.
    - عضو لجنة البحث العلمي لكلية الملك عبدالله الثاني لتكنولوجيا المعلومات من 8/2012 9/2014.
    - عضو لجنة الدراسات العليا لكلية الملك عبدالله الثاني لتكنولوجيا المعلومات من 9/2013 9/2014.
    - عضو لجنة الخطة الدر اسية لكلية الملك عبدالله الثاني لتكنولوجيا المعلومات من 9\2013 9\2014.
      - عضولجنة الاشراف على انتخابات الطلبة ، الجامعة الاردنية.
    - عضو لجنة التعليم الإلكتروني. كلية الملك عبدالله الثاني لتكنولوجيا المعلومات، الجامعة الاردنية.
- الاستحداث و الاعتماد العام و الخاص لبرنامج ماجستير ذكاء الشبكة ( Web المعام و الخاص لبرنامج ماجستير ذكاء الشبكة ( Intelligence كلية الملك عبدالله الثاني لتكنولوجيا المعلومات 2014/2.
  - عضو مشارك عن الجامعة الاردنية في مشروع Master in Health". Informatics", HEAL+, Erasmus+ Project 2015.
  - محرر لكتاب في Springer, ومؤلف لعدد من الفصول في Springer books
- عضو لجنة اعداد و اشراف لعدد من المؤتمرات المحلية و الدولية في مجال التعلم الالي و التنقيب عن البيانات و النشر الالكتروني.
  - المشاركة في 10 مؤتمرات دولية كمؤلف.
- محكم في العديد من مجلات الفئة الأولى JCR ISI with high impact factor

## مرفق السيرة الذاتية المفصلة باللغة الانجليزية

### Ali Rodan, MIEEE

| Personal    |  |   |             |   |
|-------------|--|---|-------------|---|
| Address     | Business Information Technology<br>(BIT) department.<br>KASIT, The University of Jordan,<br>P.O.BOX 11942, Amman, Jordan |   | Nationality | Jordanian                               |
| Contact     | <b>Mobile :</b> +96279 7335203 +962776666766   |   | Emails      | A.Rodan@ju.edu.jo<br>AliRodan@gmail.com |
| Status      | Married Google scholar profile: http://scholar.google.com/citations?user=n8Z3RMwAAAAJ&hl=en                              |   |             |   |
| Education   |  |   |             |   |
| 2008 – 20   | 12   | The University of Birmingham PhD in Computer Science Thesis Title: Architectural Designs of Echo State Network. with Prof. Peter Tino               |             |   |
| 2004 – 2005 |  | Oxford Brookes University Master in Computer Science (MSc.) Dissertation: Secure Electronic Cash Systems using Web Service with Dr. Catherine Hobbs |             | Oxford, UK using Web Service Technology |
| 2000 – 2004 |  | Princess Sumaya Unive<br>BSc degree in Computer<br>Project: E-Learning Tool<br>with Prof. Walid Salameh   | ,           |   |
| 1999 – 2000 |  | Al-Ittihad Private High Schools<br>High School Certificate (Tawjeehi), Scientific Stream  |             | Amman, Jordan<br>Stream                 |

#### **Research Interest**

Reservoir Computing, Recurrent Neural Networks, Machine Learning, Data Mining, and Business Intelligence.

#### **Employment and Experience**

- Associate Professor, King Abdullah II School for Information Technology, The University of Jordan, Amman, Jordan 12<sup>th</sup> Aug, 2016 – present.
- Assistant Professor, King Abdullah II School for Information Technology, The University of Jordan, Amman, Jordan
   12<sup>th</sup> Aug, 2012 12<sup>th</sup> Aug, 2016.
   Teaching: Business Intelligence, Business Intelligence (Master level), Digital Logic Design, Web Application Development (XHTML, CSS,JS), Web Publishing
- Director of Computer Center, The University of Jordan, Amman, Jordan. 7<sup>th</sup> Sept, 2014 8<sup>th</sup> Augt, 2016.

(ASP.Net), and Fundamentals of Information Technology.

 Chairman of Business Information Technology Department, King Abdullah II School for Information Technology, The University of Jordan, Amman, Jordan. 2<sup>nd</sup> Sept, 2013 – 4<sup>th</sup> Sept, 2014 • Research Associate (Industrial Partnership), The Supplies Group Ltd, High Wycombe, UK.

6<sup>th</sup> June, 2011 – 23<sup>th</sup> Dec., 2011.

I worked on a Knowledge Transfer Partnership (KTP) project "PREDICTION OF CUSTOMER LIFETIME VALUE". It's a joint project between the University of Birmingham (Prof. Peter Tino), The University of Warwick (Dr. Sarabjot Anand), and the Supplies Group Company (CEO Noah Gresham).

Teaching Assistant, The University of Birmingham, Birmingham, UK.
 3<sup>rd</sup> Oct, 2008 – 27<sup>th</sup> June, 2012

I have been the teaching assistant for the following modules:

- Foundations of Computer Science 1 (BSc. level) (Semester1 2008, 2009, 2010).
- Foundations of Computer Science 2 (BSc. level) (Semester2, 2009, 2010, 2012).
- Fundamentals: Database Technology (MSc. level) (Semester 2, 2009).
- Information and the Web (BSc. level) (Semester 2, 2010).
- IT Lecturer, Emirates College of Technology, Abu Dhabi, UAE 1<sup>st</sup> Sept, 2005 – 14<sup>th</sup> July, 2008

I have been responsible of teaching the following Courses to Diploma and Undergraduate Students:

- Object oriented Programming (Java, C++)
- Data and Web Mining Applications (Data Warehouse, Data Mart, Decision support Resources).
- Relational Database Design (*Including practical work on Oracle 10g*).
- System analysis and Design
- Advance Web Development (XHTML 1.0, XML, DTD, CSS).
- Computer Skills (ICDL).
- Acting IT Coordinator, Emirates College of Technology, Abu Dhabi, UAE 1<sup>st</sup> June, 2007 2<sup>nd</sup> Sept, 2007 (Summer Term).
  - Teaches IT Courses.
  - Plans, organize, implements, and evaluates the IT faculty activities.
  - Supervises academic advising services
  - Participates in the process and coordinates the regular review of curricula.
  - Approves transfer of credits of courses in IT faculty.
  - Assumes memberships of the concerned college committees.

#### List of publications

#### **Journal Publications:**

- Ali Rodan, Alaa Sheta, Hossam Faris: Bi-directional Reservoir Networks Trained using SVM+ Privileged Information for Manufacturing Process Modeling.

  Soft Computing, Springer, 02/2016; Accepted.
- Ali Rodan, Hossam Faris, Ja'far Alqatawna: Optimizing Feedforward Neural Networks using Biogeography based optimization for E-mail Spam Identification. International Journal of Communications, Network and System Sciences, 01/2016; 9(1):19-28.
- Maen M. Al Assaf, **Ali Rodan**, Mohammad Qatawneh, Mohamed Riduan Abid: Comparison Study Between Informed and Predictive Prefetching Mechanisms For I/O Storage Systems.

International Journal of Communications, Network and System Sciences 05/2015; 8(5):181-186.

- Fida' Al-Obaisi, Ja'far Alqatawna, Hossam Faris, Ali Rodan, Omar AlKadi: Pattern Recognition of Thermal Images for Monitoring of Breathing Function.
   International Journal of Control and Automation 6/2015; 8(6):381-392. SERSC.
- A Rodan, A Fayyoumi, H Faris, J Alsakran, O Al-Kadi: Negative Correlation Learning for Customer Churn Prediction: A Comparison Study.
   The Scientific World Journal, 9/2014, 7 pages, Hindawi.
- A Rodan, H Faris, J Alsakran, O Al-Kadi: A Support Vector Machine Approach for Churn Prediction in Telecom Industry.
   International journal of INFORMATION, 17 (8), 3961-3970, 2014.
- H. Chen, P. Tino, A. Rodan and X. Yao: Learning in the Model Space for Cognitive Fault Diagnosis.
   IEEE Transactions on Neural Networks and Learning Systems, 25(1), pp 124-136, 2014. (c) IEEE.
- J Alsakran, A Rodan, N Alhindawi, H Faris: Visualization analysis of feed forward neural network input contribution.
   Scientific Research and Essays 9 (14), 645-651, 2014.
- N Alhindawi, J Alsakran, A Rodan, H Faris: A Survey of Concepts Location Enhancement for Program Comprehension and Maintenance.

  Journal of Software Engineering and Applications 7 (5), 413-421, 2014.
- H Faris, M Alkasassbeh, A Rodan: Artificial Neural Networks for Surface Ozone Prediction: Models and Analysis.
   Polish Journal of Environmental Studies 23 (2), pp.341-348, 2014.
- H Faris, N Ghatasheh, A Rodan, M Abu-Faraj: Predicting Surface Ozone Concentrations using Support Vector Regression
  Life Science Journal, 11 (6), pp.126-131, 2014.
- P. Tino and **A. Rodan**: Short Term Memory in Input-Driven Linear Dynamical Systems.

Neurocomputing, Vol. 112, pp.58-63, 2013. (c) Elsevier.

- A. Rodan and P. Tino: Simple Deterministically Constructed Cycle Reservoirs with Regular Jumps.
  - Neural Computation, 24(7), pp 1822-1852, 2012. (c) MIT Press.
- A. Rodan and P. Tino: *Minimum Complexity Echo State Network*. IEEE Transactions on Neural Networks, 22(1), pp 131-144, 2011. (c) IEEE.

#### **Refereed Conference Papers**

 Ali Rodan, Hossam Faris: Credit Risk Evaluation using Cycle Reservoir Neural Networks with Support Vector Machines Readout.
 Lecture Notes in Artificial Intelligence, Springer - Verlag Berlin Heidelberg, Accepted Nov. 2015.

- **Ali Rodan** and Hossam Faris: *Echo State Network with SVM-readout for customer churn prediction.* 
  - **IEEE Conference in Applied Electrical Engineering and Computing Technologies (AEECT 2015),** pp.1-5, Deadsea, Jordan, 2015.
- Dana A. Al Qudah, Alexandra I. Cristea, Suncica Hadzidedic Bazdarevic, Samar Al-Saqqa, Ali Rodan, Wei Yang: Personalized E-Advertisement and Experience: Recommending User Targeted Ads.
  - **12th IEEE International Conference on e-Business Engineering (ICEBE 2015),** pp. 56-61, Beijing, China, 2015.
- P. Tino and A. Rodan: Short Term Memory Quantifications in Input-Driven Linear Dynamical Systems.
  - **20th European Symposium on Artificial Neural Networks Computational Intelligence and Machine Learning- ESANN 2012**, Bruges (Belgium), 25-27 April 2012, pp. 43-48., 2011.
- A. Rodan and P. Tino: Negatively Correlated Echo State Networks.
   19th European Symposium on Artificial Neural Networks Computational Intelligence and Machine Learning- ESANN 2011, Bruges (Belgium), 27-29 April 2011, pp. 53-58., 2011.
- **A. Rodan** and P. Tino: Simple Deterministically Constructed Recurrent Neural Networks.
  - In **Intelligent Data Engineering and Automated Learning (IDEAL 2010)**, pp. 267-274, Lecture Notes in Computer Science, LNCS 6283, Springer-Verlag, 2010.

#### **Invited Talks**

- **A. Rodan** and N. Landia: *Optimisation of Online Ad-Spend with regard to Predicted Customer Lifetime Value*.
  - KTN project presented at the Alan Tayler Day, **St Catherine's College, University of Oxford**, Oxford, UK, Nov., 2011.
- A. Rodan: Demystifying Reservoir Computing.
  School of Computing and Mathematics, Keele University, Keele, Staffordshire, UK, March, 2011.
- A. Rodan: Reservoir Computing Methods for RNN training.
   School of Computer Science, The University of Birmingham, Birmingham, UK, May 2010.

#### **Case Studies**

**A. Rodan**, P. Tino and N. Gresham: *Prediction of Customer Lifetime Value*, **A case study for the KTP project**:

<u>Link:</u> <a href="https://connect.innovateuk.org/documents/3000302/6460200/IP11-014">https://connect.innovateuk.org/documents/3000302/6460200/IP11-014</a> TSG Birmingham CaseStudy;jsessionid=CC2266E8266A3946EF7DB99812A7AFF5.1?version=1.

#### Journal and Conference refereeing

- I have referred for the following Journals and Conferences. Journals:
  - IEEE transactions on Neural Networks
  - Neural Computation MIT Press.

- Scientific Reports Nature.
- Neural Network World.
- Natural Computing Springer.

#### Conferences:

- ICEPUB 2016
- AEECT 2015
- ICEPUB 2015
- NTP 2014
- ICONIP 2012
- ESANN 2011 and 2012
- IDEAL 2010 and 2011
- IJCNN 2010
- ICANN 2010
- I am organizing a Call for Chapters for our upcoming book entitled "Social Media Shaping E-publishing" to be published by **Springer in late 2016**.

**Editors:** Dr. Nashrawan Taha, Dr. Rizik Al-sayyed, Dr. ja'far Alqatawna, and **Dr. Ali Rodan**.

- I organized a **special session "Reservoir Computation" at IJCNN 2010** Conference in Barcelona, Spain with **Prof. Peter Tino** (University of Birmingham) and **Dr. Pedro Gutierrez Pena** (University of Cordoba, Spain).
- -I also involved in organizing a special session "Theory and Practice of Adaptive Input Driven Dynamical Systems" at ESSAN 2012 Conference in Bruges, Belgium with Prof. Peter Tino (University of Birmingham), Prof. Herbert Jaeger (Jacobs University, Germany) and Prof. Jochen Steil (Bielefeld University, Germany).

#### **Funded projects**

- Modernization of Teaching Methodologies in Higher Education: EU Experience for Jordan and Palestinian Territory (METHODS), Erasmus+ Project 2016.
- o Master in Health Informatics", HEAL+, Erasmus+ Project 2015.
- Panorama of the Royal Speeches, Scientific Research Fund project 2015
- Enhancing Quality of Technology-Enhanced Learning at Jordanian Universities", eQTeL, TEMPUS Project 2013.
- Early warning system to combat violence at the University,
   Deanship of Scientific Research, The University of Jordan 2012.

#### **Representative Person Roles**

- King Abdullah II School for Information Technology's (KASIT) representative person in the university council, 2014-2015.

#### Participation in Committees

- External Committees
  - University of Jordan representative for the membership of the Technical Advisory Committee in the Jordanian Universities Network, 2014 – 2016.

 Committee member of several universities programs accreditations in the Higher Education Accreditation Commission, 2013 – present.

#### - University Level

- Member of the Higher Committee for the annual book, The University of Jordan, 2014 2016.
- o Committee Member of the University's website, University of Jordan, 2014 2016.
- Member of the Committee for computerization the compulsory University requirements and electives courses, University of Jordan, 2014 – 2015.
- Member of the Committee to issue a monthly e-newsletter of the University of Jordan, 2014 – 2016.
- Member of the Preparatory Committee of the Alumni Forum , University of Jordan, 2014 – 2016.

#### College Level

- E-learning Committee, King Abdullah II School for Information Technology (KASIT), The University of Jordan, 2013 – 2016.
- PhD program in Computer Science Committee, King Abdullah II School for Information Technology (KASIT), The University of Jordan, 2013 – 2014.
- Scientific Research Committee, King Abdullah II School for Information Technology (KASIT), The University of Jordan, 2013 – 2014.
- Graduate Studies Committee, King Abdullah II School for Information Technology (KASIT), The University of Jordan, 2013 – 2014.
- Study Plan Committee King Abdullah II School for Information Technology (KASIT), The University of Jordan, 2013 – 2014.

#### Department Level

- Graduate Studies Committee, Department of Business Information Technology, KASIT, The University of Jordan, 2014 – present.
- Student Training Committee, Department of Business Information Technology, the University of Jordan, 2012 – present.
- Appointment and Promotion Committee, Department of Business Information Technology, the University of Jordan, 2013 – present.
- Study Plan Committee, Department of Business Information Technology, the University of Jordan, 2013 – present.

#### **Master Students Supervision**

- Ghofran Al-Qaralleh (2015 ), MSc. Thesis Title: "instance selection for active learning in network intrusion detection", The University of Jordan.
- **Huda Jazmawi (2015 ),** MSc. Thesis Title: "Effort Estimation for Web-Based Projects Using Genetic Algorithms", The University of Jordan.
- **Ashraf Yousif (2015 ),** MSc. Thesis Title: "Intrusion Detection systems (IDS) using high dimensional space modelling", The University of Jordan.

- Mais Haj Qasem (2014 2015), MSc. Thesis Title: "Data Mining Approach for Commercial Data Classification and Migration in Hybrid Storage Systems", The University of Jordan.
- **Duaa Elsarraj** (2014-2015), MSc. Thesis Title: "Demystifying Echo State Network with deterministic simple topologies", The University of Jordan.

# I also co-supervised the following Master students Thesis at the University of Birmingham, UK:

- May Tamara Stow, MSc. Thesis Title: "Memory Capacity of Recurrent Neural Networks", finished Oct. 2011.
- **Jiazhen Xie,** MSc. Thesis Title: "Modelling Customer Lifetime Value", **finished Oct. 2011.**

#### **Programming Skills and Projects**

#### **Programming**

- C/C++
- JAVA
- Visual Basic and VB.Net
- Pascal, Cobol, Assembly
- Parallel Programming PVM and Beowulf Cluster.
- Client /Server Applications using Java RMI and SOAP.
- SQL, PL/SQL
- Network Security Using OpenSSL
- CSP Formal notation for design concurrent system Language
- Formal Specification Using Z notation, UML
- Crystal Reports, SQL Server 2012
- HTML 5.0, XHTML 1.1 Strict, XML
- CSS, DTD, XML Schema, Schematron

#### **System Administrations**

- Linux, Solaris, Unix
- Microsoft Windows 2000, XP.

#### **PROJECTS**

- Master Dissertation Topic: Secure Electronic Cash Using Web Services.
- E-Learning Tool and Online Test Exams Using ASP.Net (B.Sc. Graduation Project)
- Distributed Bank System (Web Service Application) using GSOAP.
- Weather Simulation using JAVA RMI.
- Train Simulation Using PVM and Beowulf Cluster.
- Establish Notepad Using Java.

#### Personal Skills

- First year research students representative 2009 at the University of Birmingham.
- I was elected as the MSc. Students Representative 2004, which enabled me to develop my communication skills at Oxford Brookes University.
- Manage to live and work with other people from different countries.
- Qualified to work within a team.
- Manage to work under pressure, working for long hours.

#### Interests / Activities

Reading, Web Browsing, and Travelling.