FINAL PROGRAM

2-4 March 2015

Arab Open University

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NOTES
Overhead and LCD Projector are standard
The underlined authors are usually the presenters.
Conference Site: Arab Open University, Bahrain Branch, Building No. 890, Road No. 3220, Block No. 732, A'Ali, Bahrain
For any local information contact: Dr. Khaldoon Al-Roomi, Email: director.bahrain@aou.org.bh
University Tel: +973 1740 7077 website: http://www.aou.org.bh

Only papers in gray boxes are eligible for the best paper award

Monday, March 2, 2015

09.30 - 15.00 Registration

10.00 - 10.30 Welcome
  Welcome Address
  Dr. Khaldoon Al-Roomi, AOU, Bahrain

  Welcome Speech
  Professor Riyad Y. Hamza
  General Secretary of the High Education Council
  Et al...

10.30 - 11.00 Coffee/Tea Break

11.00 - 12.30 Session I

DATA SIMULATION

11.00-12.30 Session Chairperson:
  Mr. Hammad Nabhan, IT Dept. Arabian Gulf University

  COMPLEX_01
  Ghana Class Room Interactions Evaluated through Networks and Simulation
  Liz Johnson
  ........................................................................................................................................5
Monday, March 2, 2015

INFO_01
Data and Control Flow Visualization by Transforming Software into Schematic Diagrams
Nils Potthoff, Christoph Brandau, Carsten Gremzow and Dietmar Tutsch ................................................................. 20

INFO_03
Region Feature Extraction Based on Improved Texture Feature Extraction Method in High Resolution Image
D. Antony Pandiarajan, S. Hameetha Begum and S.N. Nisha Rani ...... 28

12.30 - 13.30 Lunch Break

13.30 - 14.30 Session II

NETWORKS AND LOGISTICS SIMULATION
13.30-14.30  Session Chairperson:
Dr. Abdelhadi Abdel Wahab, Vice Dean for Technological Studies, Arabian Gulf University

NET_04
Performance Evaluation of Video Conferencing over Ad Hoc Wireless Networks using Different Routing and Queuing Techniques
Azeddien M. Sllame, Abdelrahim Raey, Basher Mohamed and Abdelhafed Alagel ............................................................................. 37

BIO_08
Hybrid Modelling of Integrated Care Systems
Tillal Eldabi ............................................................................................................................................................................. 42
Monday, March 2, 2015

14.30 - 15.00 Coffee/Tea Break

15.00 - 17.00 Session III

COMPUTERS IN MEDICINE AND BIOLOGY

15.00-17.00

Session Chairperson:
Associate Prof. Mohamad Sabry, Arabian Gulf University

XXXX
Computer Simulation of Diabetic Gastroparesis
Omar Al Qabandi .......................................................... 5A

XXXX
Mathematical Modeling and Simulation of Adynamic Ileus
Ammar Mohammad Yasser.................................................. 6A

xxxx
Computer Analysis of the Electrical Wave Phenomenon in the Small Intestine
Abdullah Rafea.................................................................. 7A

xxxx
Bolus Propulsion in the Gut
Omar Al Qatrawi ............................................................ 8A

xxxx
Computer-Aided Evaluation of Motility in the Post-Surgical Human Stomach
Noor Shamlooh............................................................... 9A

xxxx
Systems Biology Approach in Medicine
Roustem Miftahof............................................................ 10A

17.00 - FREE EVENING
Tuesday, March 3, 2015

09.00 - 14.00  Registration

09.00 - 10.00  Session IV

TUTORIAL

09.00-10.00-  Session Chairperson:
              Liz Johnson, Managing Editor of the Journal on Policy & Complex Systems

TUT_01_01  
Understanding Complexity I: Simple Applications for Political Science and Policy Research & Theory Development
Liz Johnson

10.00 - 10.30  Coffee/Tea Break

10.30 - 12.30  Session V

TUTORIAL

10.30-12.30-  Session Chairperson:
              Liz Johnson, Managing Editor of the Journal on Policy & Complex Systems

TUT_01_02  
Understanding Complexity I: Simple Applications for Political Science and Policy Research & Theory Development
Liz Johnson

12.30 - 13.30  Lunch Break
Tuesday, March 3, 2015

13.30 - 14.30  Session VI

TUTORIAL

13.30-14.30  Session Chairperson:
Liz Johnson, Managing Editor of the Journal on Policy & Complex Systems

TUT_02_01
Understanding Complexity II: A Simple Guide to Using & Developing Agent-Based Models for Research
Liz Johnson

14.30 - 15.00  Coffee/Tea Break

15.00 - 17.00  Session VII

WORKSHOP

15.00-17.00  Session Chairperson:
Prof. Dr. Roustem Miftahof, Arabian Gulf University

WO_01
INTRODUCTION TO COMPUTATIONAL BIOLOGY
Organized by Arabian Gulf University, Kingdom of Bahrain - Under the Patronage of His Excellency Dr. Khalid Al Ohaly, President of Arabian Gulf University

Recent advances in biology have created new opportunities for understanding biological problems from an integrated systems perspective. This emerging field, known as computational biology, is an integration of concepts and ideas from life sciences, engineering disciplines and computer science, and emphasizes the functional behavior of components working together. Whereas systems computer modeling and design are well-established in engineering disciplines, until recently it has been relatively rare in biology.
In this workshop we explore the opportunities for the application of this multidisciplinary approach which brings together systems biology analysis, engineering, and concepts from computer science to solve problems in biology and medicine.
It will be of interest to biologists and doctors wishing to explore the role and advantages of numerical experimentation in their subject areas, as well as for mathematicians interested in new areas of applications.
The workshop will combine introductory input lectures with discussion and time for your questions
Tuesday, March 3, 2015

19.00 - 22.00  CONFERENCE DINNER

More info at the conference on location and meeting place
Wednesday, March 4, 2015

09.30 - 10.00  Registration

09.30 - 10.00  Session VIII

GAMING

Session Chairperson:
Mr. Hammad Nabhan, IT Dept. Arabian Gulf University.

GAME_01
Transmitting Al Ardha: Traditional Arab Sword Dance
Muqeem Khan

10.00 - 10.30  Coffee/Tea Break

10.30 - 12.30  Session IX

TUTORIAL

10.30-12.30  Session Chairperson:
Liz Johnson, Managing Editor of the Journal on Policy & Complex Systems

TUT_02_02
Understanding Complexity II: A Simple Guide to Using & Developing Agent-Based Models for Research
Liz Johnson

12.30 - 12.45  Session X

CLOSING SESSION

12.30-12.45-  Session Chairperson:
Dr. Khaldoon AlRoomi, President AOU

Best Paper Award Ceremony and closing statements
POSTER PRESENTATIONS

During the event the following posters will be displayed in the registration area

P_01
A novel computer-based model to simulate diabetic gastroparesis and its therapeutical management
Yasser Ammar, College of Medicine and Medical Sciences, Manama, Bahrain

P_02
Non-linear wave patterns in the small intestine
Abdullah Rafea, College of Medicine and Medical Sciences, Manama, Bahrain

P_03
Numerical simulations of electromechanical activity of the human gastric smooth muscle
Omar Al Qabandi, College of Medicine and Medical Sciences, Manama, Bahrain

P_04
Biomechanics change in postbariatric stomach
Noor Shamlooh, College of Medicine and Medical Sciences, Manama, Bahrain

P_05
Pharmacological modulation of bolus movement in the gut
Omar Al-Qatrawi, College of Medicine and Medical Sciences, Manama, Bahrain
SEE YOU NEXT YEAR

AT MESM 2016- GAMEON-ARABIA’2016
(dates and location to be confirmed)

ALL SESSION CHAIRPERSONS IN THIS PROGRAM ARE PROVISIONAL

Session Chairs are chosen on a voluntary basis by proposals by either authors or local committee members or are appointed by the Track Chairs, General Program Chair or General Conference Chair. They are responsible for their assigned session. They make sure their speakers are available, take care of the timing within the session, chair the discussion after each presentation and introduce each speaker based on the CV’s given to them by the authors. If a session chair is not available then the first author takes on the responsibility to chair.

THE NUMBERS NEXT TO THE PRESENTATIONS DENOTE THE PAGE-NUMBERS IN THE PROCEEDINGS. IF NO NUMBERS ARE MENTIONED THEN THIS PAPER IS NOT PUBLISHED IN THE PROCEEDINGS

THE AUTHORS WHO ARE UNDERLINED ARE NORMALLY THE PRESENTERS

PAPERS IN GREY BOXES ARE THE EXTENDED PAPERS ELIGIBLE FOR THE BEST PAPER AWARD

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http://www.eurosis.org

BEWARE: As some of the authors might not be granted a Bahraini visa it is possible that some of the papers might not be presented.
EUROSIS was borne out of discussions with the European Community to set up a new kind of Society, which would be project-driven instead of driven by pure membership and conferences.

The aim of the Society is to set up topic related Technical Committees which will link directly to European Projects in the field of computer simulation and related areas and to act as a knowledge pool for future European Networks of Excellence, like MOSAIC.

If you would like to receive more information about EUROSIS, please contact

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CONFERENCE LOCATION

Visitor’s Survival Guide
When arriving by plane in Bahrain you will do so at Bahrain International Airport.

Flight Information: +973 17339339

At the airport you can take a taxi to the city centre. For information on taxi charges follow the taxi link.

To reach the university you can do so by taxi
Taxis
Speedy Motors +973 17682999
Bahrain Limo +973 17266266
Arabian Taxi +973 17461746

or by bus:
By bus take Bus Lines 9-11-15 where you can exit at the following stops:
Shaikh Zaid Avenue (stop 1-2 or Drivers Training School)
A Ali Avenue 32

Entry Requirements:
When traveling to Bahrain, this information should help you to prepare for your visit.

- Visa Information
- Customs Rules
- Taxi Rates