BIONETICS 2011 Programme

Monday 5th December

0930 Welcome. Keynote – Jeremy Pitt, Imperial College, London.

"A Methodology for Engineering Intelligent Socio-Technical Systems"

1045 Coffee/Tea

1100 BIONETICS Session 1

Incremental versus Optimal Network Design: The Price of Evolution *Saeideh Bakhshi, Constantine Dovrolis*

A genetic algorithm for a joint routing and scheduling problem in heterogeneous networks *Hela masri, Adel Guitouni and Krichen Saoussen*

The Protein Processor Associative Memory on a Robotic Hand-Eye Coordination Task *Omer Qadir, Jon Timmis, Andy Tyrrell, Gianluca Tempesti*

1230 Lunch – Tempus Restaurant

1330 Session 2 – BIONETICS Work in Progress papers

Dynamic Hawk and Dove games within flocks of birds *Eitan Altman, Julien Gaillard, Majed Haddad, Piotr Wiecek*

Some initial experiments in calibrating emissions models using an Evolutionary Algorithm *Neil Urquhart*

A Comparative Evaluation of Business Intelligence Technologies with Application to Product Profiling *Takudzwa Mabande, Antoine Bagula, Joseph Balikuddembe, Pheeha Machaka*

1330 NANO special session

Analog Molecular Communication in Nano-networks *Ali Akkaya, Tuna Tugcu*

Synchronization of Inhibitory Molecular Spike Oscillators *Michael Moore, Tadashi Nakano*

SHORT: Propagation Delay of Brownian Molecules in Nano-biosensor Networks *Yutaka Okaie, Tadashi Nakano, Michael Moore*

1500 – 1530 Coffee

1530 – 1730 Nano (cont.) and BIONETICS session 2

Co-channel Interference for Communication via Diffusion System in Molecular Communication *Mehmet Şükrü Kuran, Tuna Tugcu*

Channel Design and Optimization of Active Transport Molecular Communication*) Nariman Farsad, Andrew Eckford, Satoshi Hiyama*

BIO-CORE: Bio-inspired Self-Organising Mechanisms Core *Jose Luis Fernandez-Marquez, Giovanna Di Marzo Serugendo, Sara Montagna*

Analysing the Reliability of a Self-reconfigurable Modular Robotic System *Lachlan Murray, Wenguo Liu, Alan Winfield, Jon Timmis, Andy Tyrrell*

1530 – 1800 BIONETICS Work in Progress papers 2

A Biologically-Inspired Model for Recognition of Overlapped Patterns *Saifullah Mohammad*

A Bio-inspired Coverage and Connectivity Maintenance Algorithm *Emi Mathews, Tobias Graf, Kosala Suranga Sanjaya Bandara Kulathunga*

Monitoring of a Large Wi-Fi Hotspots Network: Performance Investigation of Soft Computing Techniques *Pheeha Machaka, Antoine Bagula, Takudzwa Mabande*

Gossip inspired sensor activation protocol for a correlated chemical environment *Champake Mendis*

1900 Conference Dinner – National Railway Museum, Leeman Road, York

Tuesday 6th December

0915 Keynote – Dario Floreano, EPFL

"Micro Unmanned Aerial Vehicles: From Biology to Engineering"

1030 Coffee/Tea

1100 BIONETICS session 3

Comparison of Ant-Inspired Gatherer Allocation Approaches using Memristor-Based Environmental Models *Ella M Gale, Benjamin de Lacy Costello, Andy*

Adamatsky

Genetic Channel Capacity Revisited *Félix Balado*

Biologically Inspired Attack Detection in Superpeer-Based P2P Overlay Networks. *Paul Snyder, Yusuf Osmanlioglu, Guiseppe Valetto*

1300 Lunch – Tempus Restaurant

1400 PhD Forum Keynote – Gusz Eiben

1500 Coffee/Tea

1515 1715 – PhD forum

(20 mins per paper)

Applying Bees Algorithm for Trust Management in Cloud Computing *(Full Paper) Mohamed Firdhous, Osman Ghazali, Suhaidi Hassan*

Artificial Negative Selection: Searching for an Appropriate Application Scenario *(Full Paper) Yevgen Nebesov*

Spatio-Temporal Modeling and simulation of Mycobacterium Pathogenesis using Petri nets *(Full Paper) Rafael Carvalho, Fons J. Verbeek, Annemarie Meijer, Willem Davids*

Immune Inspired Adaptive Information Filtering: Focusing on Profile Adaptation *(Full Paper) Nurulhuda Mohd Azmi, Fiona Polack, Jon Timmis*

Design and Modeling for Self-Organizing Autonomic Systems *(Full Paper) Paul Snyder, Giuseppe Valetto*

Asynchronous Idiotypic Network Simulator *(Demo Paper) Kevin Sim*

1745 PhD Forum "ask the expert"

1845 Close.