

EuroGP programme (draft at 25 Feb)

Wednesday 30 March 2016

11:10-13:00 Session 1 (Chair: EuroGP co-chairs)

Full presentations: *Models of Evolution*
(format: 18 minutes per paper + 5 min. questions)

Genetic Programming based Hyper-heuristics for Dynamic Job Shop Scheduling: Cooperative Coevolutionary Approaches

John Park, Yi Mei, Su Nguyen, Gang Chen, Mengjie Zhang

A Genetic Programming Approach for the Traffic Signal Control Problem with Epigenetic Modifications

Esteban Ricalde, Wolfgang Banzhaf

Plastic Fitness Predictors Coevolved with Cartesian Programs

Michal Wiglasz, Michaela Drahosova

Short presentations: *Applications*
(format: 5 minute paper pitch*)

Search-Based SQL Injection Attacks Testing using Genetic Programming

Benjamin Aziz, Mohamed Bader, Cerana Hippolyte

Towards Automated Strategies in Satisfiability Modulo Theory

Nicolás Gálvez Ramírez, Youssef Hamadi, Eric Monfroy, Frédéric Saubion

Patterns for Constructing Mutation Operators: Limiting the Search Space in a Software Engineering Application

Thomas Kühne, Heiko Hamann, Svetlana Arifulina, Gregor Engels

Iterative Cartesian Genetic Programming: Creating general algorithms for solving Travelling Salesman Problems

Patricia Ryser-Welch, Julian F. Miller, Jerry Swan, Martin A. Trefzer

* Short presentations must have a corresponding poster in the poster session. Full presentations are encouraged to do likewise.

14:00-15:50 Session 2 (Chair: Jerry Swan)

Full presentations: *Classification*
(format: 18 minutes per paper + 5 min. questions)

One-class Classification for Anomaly Detection with Kernel Density Estimation and Genetic Programming

Van Loi Cao, Miguel Nicolau, James McDermott

On the Impact of Class Imbalance in GP Streaming Classification with Label Budgets

Sara Khanchi, Malcolm I. Heywood, Nur Zincir-Heywood

Genetic Programming for Region Detection, Feature Extraction, Feature Construction and Classification in Image Data

Andrew Lensen, Harith Al-Sahaf, Mengjie Zhang, Bing Xue

A Genetic Programming-based Imputation Method for Classification with Missing Data

Cao Truong Tran, Mengjie Zhang, Peter Andreae

Short presentations: *Foundations*

(format: 5 minute paper pitch*)

Modelling Evolvability in Genetic Programming

Benjamin Fowler, Wolfgang Banzhaf

Grammar Design for Derivation Tree Based Genetic Programming Systems

Stefan Forstenlechner, Miguel Nicolau, David Fagan, Michael O'Neill

Geometric Semantic Genetic Programming is Overkill

Tomasz P. Pawlak

Semantic Geometric Initialization

Tomasz P. Pawlak, Krzysztof Krawiec

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17:00-18:50 Session 3 : Best Papers (Chair: Mengjie Zhang)

(format: 20 minutes per paper + 5 min. questions)

Evolutionary Approximation of Edge Detection Circuits

Petr Dvoracek, Lukas Sekanina

Surrogate Fitness via Factorization of Interaction Matrix

Paweł Liskowski, Krzysztof Krawiec

Scheduling in Heterogeneous Networks using Grammar-based Genetic Programming

David Lynch, Michael Fenton, Stepan Kucera, Holger Claussen, Michael O'Neill

On the Analysis of Simple Genetic Programming for Evolving Boolean Functions

Andrea Mambrini, Pietro S. Oliveto