

### Finnish Mathematical Days 2016

In the beginning of January, Department of Mathematics and Statistics of University of Turku hosted Finnish Mathematical Days, an event organized every second year by the Finnish Mathematical Society as an exhibition of research and education of Finnish mathematics. Turku Centre for Computer Science will publish the proceedings of the event within its TUCS Publication Series. A report on Finnish Mathematical Days 2016 shall appear in the next newsletter.

### Upcoming short courses

#### Stochastic biomodelling (2 ECTS)

Dr. Andrzej Mizera, University of Luxembourg

8.-19.2.2016

Stochasticity in biological processes

Chemical master equation (CME) for various systems of biochemical reactions

Gillespie's direct method algorithm and its implementation in Matlab

#### Heterogeneous system architectures (2 ECTS)

Dr. Antonio Rosario Miele, Politecnico di Milano, Italy

8.-12.2.2016

Concept of heterogeneous system architectures (HSA)

Hardware and architectural aspects

Overview of organization of modern CPUs and GPUs

Memory infrastructure, cache coherency, virtual memory issues

OpenCL programming paradigm

Industrial and academic solutions for runtime resource management

#### Knowledge management - Information Security (2-6 ECTS)

Prof. Tero Päivärinta, Luleå University of Technology, Sweden

14.-18.3.2016

Concept of knowledge management

Understanding and modelling organizational knowledge assets

Information security risk assessment process and organizational knowledge assets

Knowledge management of organizational information security

## Adaptive data forecasting based on artificial intelligence (2 ECTS)

Dr. Iulian Nastac, Polytechnic University of Bucharest, Romania  
period IV

Introduction to Artificial Intelligence Theory

Encoding the knowledge, rule-based reasoning, case-based reasoning

Data mining models

Artificial Neural Network models for data forecasting

Principal Component Analysis

Analysis of data forecasting applications in industry, economy, bio-engineering, environmental pollution preventing, and meteorology

## Design science research in information systems (2 ECTS)

Prof. Alan Hevner, University of South Florida, USA

first week of May 2016

Design Science Research (DSR) fundamentals

DSR Framework and Guidelines

DSR cycles, artifacts, publication schema, exemplars

Knowledge Contribution Framework

Performing DSR

Extending the range of DSR

Future directions of DSR

## Seminar "Thinking and computing: machines and humans" (5 ECTS)

Tuesdays @10:15-12:00

@ Room 150, Publicum, 1st floor

## MATTI Doctoral Programme Application Round 25.1.-12.2.2016

Faculty of Mathematics and Natural Sciences of University of Turku launches a call for applications to pursue a doctoral degree. More information can be found at

[UTU.fi - Research - UTUGS - Doctoral Programmes - MATTI - How to Apply](#)

## Scholarships for students studying at Åbo Akademi (deadline 12.2.2016)

Scholarships are intended for enrolled regular students studying for a degree. More information can be found at:

[ABO.fi - Studier - Blanketter - Blanketter för stipendier och understöd](#)

## CV-clinic

03.02., 09.02., 17.02., 25.02.2016 @ 13:00 - 15:00

@ UTU Career Services (Rekry), Henrikinkatu 7

Bring your application and CV for the review of career advisers. Registration is not required.