

RULES: LOGIC AND APPLICATIONS 2018

PROGRAM

Wednesday, December 19, 2018

09:30 Registration

10:15 Opening Talk

Petros Stefanias (NTUA)

Research Trends and Open Problems in the Formalization of Computer Ethics

Session 1: Robotics, Ethics, Rules and Formal Methods

10:30

Sofia Almpani (NTUA)

A Rule-Based Model for Compliance of Medical Devices Applied to the European Market

Dimitris Alimisis (EDUMOTIVA)

Education in Robotics and Education with Robotics: The INBOTS Project

Maria Dimarogkona (NTUA)

Ethics of Algorithms and Formal Methods

Dimitris Zafeirakopoulos (NTUA)

Deontic Logic and Robot Ethics

12:00 Lunch Time

13:50 Welcome Speech

Stavros Kourkoulis (Dean of the School of Applied Mathematical and Physical Sciences)

14:00 Keynote Speaker

Harold Boley (UNB)

PSOA RuleML Explained with Blockchain Examples: Grailog Visualizations, Herbrand Models, and PSOATransRun Queries

14:45 Break

15:00 Session 2: PSOA RuleML and Applications

Lukas Graetz (Leipzig University)

PSOA Prova: PSOA Translation of Pure Production Rules to the Prova Engine

Theodoros Mitsikas (NTUA)

Formalizing Air Traffic Control Regulations in PSOA RuleML

Iakovos Ouranos (HAA)

On the formalization of the Airport domain

16:00 Break

16:15 Session 3: Argumentation and Applications

Nikos Spanoudakis (Technical Un. Crete)

Smart Contracts and Argumentation

Nikos Asimakis and Yannis Kioyvrekis (NTUA)

Gorgias and the Selection of Statistical Methodologies

Antonios Kakas (University of Cyprus)

Gorgias: Argumentation in Practice

Ioannis Vandoulakis (Greek Open University)

The convolution of argumentation and proving in searching for mathematical proof

Mattheos Mpournazos

Strategic Maneuvering and Defeasible Systems

18:00 Break

18:15 Session 4: Applications of Formal Methods

Georgios Pitsiladis (NTUA)

Privacy Calculus in Maude

Kostas Barlas (University of West Attika)

Formalizing a Web Standard's Requirements: RSS v2.0

Nikos Triantafyllou (NTUA & U Aegean)

Smart Contracts and Formal Reasoning: "Should we trust in code after all?"

Katerina Ksytra (NTUA & U Aegean)

Reactive Rules and Applications

19:45 Break

20:00 Petros Kavassalis (U Aegean)

Closing talk and discussion

Petros Stefanias (NTUA)

Thursday, December 20, 2018

10:00 **Session**

Asterios Gantzounis (NTUA)

Yannis Kioyvrekis (NTUA)

Nick Bassiliades (Aristotle University of Thessaloniki)

Zero knowledge proofs

Open Questions for Blockchain

SWRL2SPIN: A tool for translating SWRL rules to SPIN rules.

12:00 Lunch Time

14:00 Round table discussion (Informal)