

You are invited to the 51th edition of the PRAGUE COMPUTER SCIENCE SEMINAR

BARBORA BÜHNOVÁ

Trust Management in Dynamic Autonomous Ecosystems

December 8, 2022

4:15pm

**Auditorium S5, MFF UK
Malostranské nám. 25,
Praha 1**

The lecture will be followed by a discussion

ABSTRACT

Digitalization is leading us towards a future where people, processes, data and things are not only interacting with each other, but might start forming societies on their own. In these dynamic systems enhanced by artificial intelligence, trust management on the level of human-to-machine as well as machine-to-machine interaction becomes an essential ingredient to supervise safe and secure progress of our digitalized future. In this talk, we will look into the essential elements of trust management in complex digital ecosystems, and discuss how trust-building can be leveraged to support people in safe interaction with other autonomous digital agents (e.g., self-driving cars, drones, and other robotic systems), highlighting our research on establishing trust among autonomous agents.

ABOUT THE PRAGUE COMPUTER SCIENCE SEMINAR

The seminar takes place once a month on Thursdays at 4:15pm (mostly excluding June to September, and December) alternately in the buildings of Faculty of Electrical Engineering, Czech Technical University in Prague, Karlovo nám. 13, Praha 2 and Faculty of Mathematics and Physics, Charles University, Malostranské nám. 25, Praha 1. Its program typically consists of a one-hour lecture followed by a discussion. The lecture is based on an (internationally) exceptional or remarkable achievement of the lecturer, presented in a way which is comprehensible and interesting to a broad computer science community. The lectures are in English.



Barbora Bührenová is an Associate Professor and Vice-Dean at Masaryk University (MU), Faculty of Informatics (FI MU) in Brno. Following her research career in Germany and Australia, she now leads multiple research teams at Faculty of Informatics MU (software architecture) and Czech CyberCrime Centre of Excellence C4e (critical infrastructures). She is the Steering Committee chair of the International Conference on Software Architecture (ICSA) and has been involved in organization of numerous leading conferences (e.g. in OC of ICSE, ESEC-FSE, ASE). She acts as a reviewer and (guest) editor in multiple journals (e.g. IEEE TSE, Springer EMSE, Elsevier SCP, Elsevier JSS, Springer SoSyM, Wiley SME), and is member of the IEEE TSE Review Board. Next to her academic activities, she is the chair of the Association of Industrial Partners at FI MU (with 30+ companies), and is a Co-Founding and Governing Board member of Czechitas, a non-profit organization aiming at making IT skills more accessible to youth and women (with 30,000+ graduates).

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