

24 - CVUT - Czech Institute of Informatics, Robotics, and Cybernetics

- CTU (ČVUT in Czech) - oldest non-military technical university in Europe (1707)
- CIIRC (2013) - research institute in CS, robotics, AI, cybernetics
- 2 ERC grant holders in AI (AI, reasoning, learning, perception)
- 3 large national projects in AI, reasoning, learning, robotics, perception
- One of the first CLAIRE offices headed by V. Dockal
- ELLIS unit since 2020
- TAILOR contributions: combining learning and reasoning, optimization

CVUT - Role in TAILOR

- Automated Reasoning and Formal Methods groups working on combinations of learning and reasoning
- Industrial Informatics group working mainly on optimization and scheduling algorithms, and their applications
- Tasks in WP 4, WP5, WP8

CVUT - Key Personnel

- Josef Urban - combining ML and AR (ERC Consolidator AI4REASON)
- Mikolas Janota - combining SMT/SAT and ML (ERC-CZ POSTMAN)
- Zdenek Hanzalek - optimization, scheduling, industrial applications

The 5 most relevant publications

1. C. Kaliszyk, J. Urban, H. Michalewski, M. Olsak: Reinforcement Learning of Theorem Proving. NeurIPS 2018: 8836-8847
2. M. Janota: Towards Generalization in QBF Solving via Machine Learning. AAAI 2018: 6607-6614
3. K. Chvalovsky, J. Jakubuv, M. Suda, J. Urban: ENIGMA-NG: Efficient Neural and Gradient-Boosted Inference Guidance for E. CADE 2019: 197-215
4. Václavík R. - Novák A. - Šůcha, P. - Hanzálek, Z. Accelerating the Branch-and-Price Algorithm Using Machine Learning In: European Journal of Operational Research. 2018, vol. 271, no. 3, pp. 1055-1069, ISSN 0377-2217
5. John Harrison, Josef Urban, Freek Wiedijk: History of Interactive Theorem Proving. Computational Logic 2014: 135-214