

# Filip Železný

born on March 5, 1974

<http://ida.fel.cvut.cz/zelezny>

11/2015 *Professor* of Computer Science, CVUT Prague  
9/2013 - 12/2015 *Chair*, Dept. of Computer Science, Faculty of Electrical Engineering, CVUT Prague  
11/2010 - 11/2015 *Associate Professor*, CVUT Prague  
3/2004 - 11/2010 *Assistant Professor*, CVUT Prague  
9/2004 - 11/2004 *Visiting Professor*, State Univ. of New York in Binghamton  
3/2003 - 3/2004 *Postdoctoral Researcher*, Univ. of Wisconsin in Madison  
3/2003 *Ph.D.*, CVUT Prague

**Research:** Founder and Head of the *Intelligent Data Analysis lab* at CVUT FEL focusing on *relational machine learning*, *inductive logic programming* and *bioinformatics*. Most important contributions in *fast relational feature construction*, *randomized search in subsumption lattices* and *algorithms for mining genomic data (expression, sequences)*

**Awards:** A. Svoboda Award for the *Best 2021 Dissertation* to my Ph.D. student G. Šír by the Czech Society for Cybernetics and Informatics, ILP 2017 *best paper* award; 2017 Machine Learning Journal soccer prediction challenge *first place*; IDA 2016 *frontier prize* for the best conference paper; Werner von *Siemens prize for the best innovation* in the Czech Republic in 2015, EMCSR 2002 *best paper* award

**Editorial Board Member:** *Machine Learning Journal* (Springer), *Journal of Data Semantics* (Springer, till 2021)

**Editor:** *Machine Learning* 109 - ILP 2019 spec. issue; *Machine Learning* 93(1) - ECML PKDD 2013 spec. issue; *Data Mining and Knowledge Discovery* 27(3) - ECML PKDD 2013 spec. issue; *Machine Learning* 94(1) - ILP 2012 spec. issue; *Machine Learning* 76(1) - ILP 2008 spec. issue; Springer *LNCS* 8188 - ECML PKDD 2013 proceedings; Springer *LNCS* 7842 - ILP 2012 proceedings, Springer *LNCS* 5194 - ILP 2008 proceedings, Springer *SCI* 220 - Knowledge Discovery Enhanced with Semantic and Social Information, 2008

**Conference Chair:** *ECAI 2014* - local co-chair, *ECML/PKDD 2013* - conference chair and program co-chair, *ILP 2012* - program co-chair, *ILP 2008* - conference chair and program co-chair

**Invited Keynote Talks:** Relational Machine Learning - *CLA 2018* (Int. Conf. on Concept Lattices and Their Applications); Semantic Web and Machine Learning: Time to Re-Sync - *KESW 2016* (Inf. Conf. on Knowledge Engineering and Semantic Web); Planning to learn: Recent developments and future directions - *PlanLearn 2012* (ECAI 2012 workshop on planning to learn); Taming the Complexity of Inductive Logic Programming - *SOFSEM 2010* (Int. Conf. on Current Trends in Theory and Practice of Computer Science)

**Journal Papers:** cca 30 papers in journals including *Journal of Artificial Intelligence Research*, *Machine Learning*, *Data Mining and Knowledge Discovery*, *BMC Bioinformatics*, *BMC Genomics*, *Bio Data Mining*, *Journal of Computational Biology*, *Journal of Biomedical Informatics*, *Transplantation*

**Other Publications:** 100+ papers in conferences including *ICML*, *ECML/PKDD*, *ILP*, *IDA*, 5 book chapters, 2 US patents. Full publication list at <http://ida.fel.cvut.cz/zelezny/publications.html>

**Dissertations Supervised to Degree:** Ondřej Hubáček - *Sports prediction market modeling with portfolio optimization* (2024), Petr Ryšavý - *Efficient genome similarity estimation for learning from sequencing data* (2023), Gustav Šír - *Deep Learning with Relational Logic Representations* (2021), Radomír Černocho - *Lock-Chart Solving* (2018), Matěj Holec - *Set-Level Classification of Gene Expression Data* (2015), Petr Buryan - *Refinement Action-based Framework for Utilization of Softcomputing in Inductive Learning* (2014), Andrea Szabóová - *Predictive Modeling of Protein-DNA Interaction through Relational Learning* (2013), Ondřej Kuželka - *Fast Construction of Relational Features for Machine Learning* (2013), Monika Žáková - *Exploiting ontologies and higher-order knowledge in relational machine learning* (2012)

**Research Projects:** Principal investigator in 20 funded projects: Czech Science Foundation (8), Czech Ministry of Education (5), European Commission (3), Czech Technology Agency (1), Czech Academy of Sciences (1), Czech Ministry of Defense (1), Czech Technical University (1)

**Contractual Research:** P/I in several contractual research projects totaling over 700k EUR (*CISCO Systems*, *Asa Abloy*, *Czech Ministry of Defense*)

**Scientometry:** (as of 12/26) Web of Knowledge h-index 14 (646 citations), Scopus h-index 17 (962 citations), Google Scholar h-index 24 (2318 citations)