

Michal Valko

Inria Lille – Nord Europe
Équipe SequeL, bureau A05
Parc Scientifique de la Haute Borne
40 avenue Halley
59650 Villeneuve d’Ascq, France

<http://researchers.lille.inria.fr/~valko/>
michal.valko@inria.fr
+33 3 59 57 7801

- EXPERIENCE ◇ **Inria – team SequeL**, Lille, France
Experienced Junior Scientist - CR1 (2014 – ...)
- ◇ **ENS Cachan – Master 2 MVA**, Cachan, France
External Lecturer - CEV (2014 – ...)
- ◇ **Inria – team SequeL**, Lille, France
Junior Scientist - CR2 (2012 – 2014)
- ◇ **Inria – team SequeL**, Lille, France
Postdoctoral Researcher (2011 – 2012), Advisor: *Rémi Munos*
- ◇ **Intel Research**, Santa Clara, CA, USA
Research Intern (2009, 2010), Advisor: *Branislav Kveton*
- EDUCATION ◇ **University of Pittsburgh**, Pittsburgh, PA
PhD in Machine Learning, August 2011.
Thesis: *Adaptive Graph-Based Algorithms*, Advisor: *Milos Hauskrecht*
- ◇ **Comenius University Bratislava**, Slovakia
MSc., Summa cum laude in Computer Science, June 2005.
Majors: Artificial Intelligence and Mathematical Methods of CS
Thesis title: *Evolving Neural Networks for Statistical Decision Theory*.
- SELECTED AWARDS Inria award for scientific excellence: Prime d’excellence scientifique (2014 - 2017)
Compunetix Best Research Award at Computer Science Department (2008 and 2011)
University of Pittsburgh Honors Convocation 2009 Recognition
Andrew Mellon Predoctoral Fellowship (Fall 2008, Summer 2009)
- RESEARCH INTERESTS machine learning, bandit theory, minimal feedback, online learning, sequential learning, graph-based methods, inverse reinforcement learning, semi-supervised learning
- SELECTED PUBLICATIONS ◇ Jean-Bastien Grill, **Michal Valko**, Rémi Munos: *Black-box optimization of noisy functions with unknown smoothness*, Neural Information Processing Systems (NIPS 2015)
- ◇ Tomáš Kocák, Gergely Neu, **Michal Valko**, Rémi Munos: *Efficient Learning by Implicit Exploration in Bandit Problems with Side Observations*, (NIPS 2014)
- ◇ Alexandra Carpentier, **Michal Valko**: *Extreme Bandits*, (NIPS 2014)
- ◇ Gergely Neu, **Michal Valko**: *Online Combinatorial Optimization with Stochastic Decision Sets and Adversarial Losses*, (NIPS 2014)
- ◇ **Michal Valko**, Rémi Munos, Branislav Kveton, Tomáš Kocák: *Spectral Bandits for Smooth Graph Functions*, (ICML 2014) [oral presentation]
- SERVICE ACTIVITIES ◇ Elected member of Inria Evaluation Committee (CE Inria 2014 – 2015, 2015 – 2019)
- ◇ Organizing Committee: JFPDA (2013), Research project reviewer: FNRS (2014 – now)

- ◇ Program Committee: AAAI (2012, 2015), IJCAI (2015), RLDM (2015), EWRL (2012, 2015), JFPDA (2014)
 - ◇ Reviewer: NIPS (2012-2015), ICML (2012-2015), COLT (2014), UAI (2011-2012), AISTATS (2016), IJCAI (2009), KDD (2011), AAAI (2009, 2014), ECML (2012), MEDINFO (2010)
 - ◇ INTEL/Inria - Algorithmic Determination of IoT Edge Analytic - 2013 (project leader)
 - ◇ European FP7 grant (CompLACS), ANR grant (ExtraLearn), NIH grants
- STUDENTS
- ◇ *Daniele Calandriello*, 2014 – 2016, PhD. student, Inria, with A. Lazaric and R. Munos
 - ◇ *Jean-Bastien Grill*, 2014 – 2016, PhD. student, Inria, with Rémi Munos
 - ◇ *Tomáš Kocák*, 2013 – 2016, PhD. student, Inria, with Rémi Munos
- INVITED TALKS
- ◇ **Michal Valko**: *Online decision-making on graphs: Smoothness and Side Observations*, Presented at DaSciM, LIX, École Polytechnique, France, April 14th, 2015 (X 2015)
 - ◇ **Michal Valko**: *Bandits on Graphs: Exploiting Smoothness and Side Observations*, Presented at CMLA, ENS Cachan, France, December 16th, 2014 (ENS 2014)
 - ◇ **Michal Valko**: *Optimistic Optimization*, Presented at MIST conference, Fačkovské sedlo, Slovakia, January 7th, 2014 (MIST 2014)
 - ◇ **Michal Valko**: *Sequential Face Recognition with Minimal Feedback*, Presented at 30 minutes of Science, Lille, May 2nd, 2013 (Inria 2013)
 - ◇ **Michal Valko**: *One Class Learning From Streams of Unlabeled Data*, Presented at Large-scale Online Learning and Decision Making Workshop, April 28th, 2012 (LSOLDM 2012)
 - ◇ **Michal Valko**: *Scaling Graph-Based Algorithms*, Presented at LAMPADA workshop, July 20th, 2012 (LAMPADA 2012)
 - ◇ **Michal Valko**: *Large Scale Sequential Learning*, opening speaker at Slovak Oxford Science, April 28th, 2012 (Oxford UK 2012)
 - ◇ **Michal Valko**: *Adaptive Graph-Based Algorithms*, Presented on July 6th, 2011 at Microsoft Research Redmond (MSR Redmont 2011)
 - ◇ **Michal Valko**: *Online Semi-Supervised Learning*, Presented in 2011 at MPI Tübingen, Germany (MPI Tuebingen 2011)
 - ◇ **Michal Valko**: *Semi-supervised Learning with Random Walks on Graphs*, Presented at 6th Comenius University Alumni conference (TAM 2009)