

Mgr. Robert Šámal, Ph.D.  
Curriculum Vitae

**Born:** January 6, 1977 in Prague, Czech Republic

**Affiliation:** Computer Science Institute of Charles University, Faculty of Mathematics and Physics, Malostranské nám. 25, 118 00 Prague, Czech Republic

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## Employment

**since 2012** assistant professor at Computer Science Institute, Charles University.

**2008–2011** assistant professor at Dept. of Applied Math., Charles University.

**2006–2008** PIMS Postdoctoral fellow at Simon Fraser University, Canada.

**2002–2006** research assistant at Inst. for Theor. Comp. Sc., Charles University.

## Education

**2001–2006** graduate (PhD) student of Computer Science at Charles University. PhD thesis (advisor prof. Jaroslav Nešetřil) defended in July 2006.

**1995–2001** master (Mgr.) student of Mathematics at Charles University.

Master thesis (advisor prof. Jaroslav Nešetřil) defended in May 2001.

**1991–1995** high school with a special program for mathematics

## Professional activities

- 31 papers published in refereed international journals
- 33 citations (according to Scopus, without autocitations)
- principal investigator of a postdoctoral grant GA ČR P201/10/P337
- principal investigator of a grant by Karel Janeček Science Endowment
- member of research team: ITI LN00A056, ITI 1M0545, CE-ITI P202/12/G061, ERC-CZ LL1201
- referee for journals J. of Graph Th., European J. of Comb., Rand. Str. and Alg., SIAM J. of Discr. Math., Discr.Math. and conferences SODA, WG, MFCS.
- received several awards during my studies (see the full list below), e.g. the first prize in SVOČ 2001 and prestigious Hlávka award in 2005
- invited speaker at Czech&Slovak Graph theory conference in 2011
- (jointly with Matt DeVos) I created web site for sharing and discussing of open problems in mathematics and theoretical computer science, called Open Problem Garden ([openproblemgarden.org](http://openproblemgarden.org)).
- I was student co-leader of correspondence seminar in mathematics for high-school students in 1995–2001 (for a web page in Czech see [mks.mff.cuni.cz](http://mks.mff.cuni.cz)). Since 2009 a senior leader of this seminar.

## Research interests

- graph theory and combinatorics, in particular
  - graph coloring and generalizations of coloring (homomorphisms)
  - flows in graphs
  - flow-continuous and tension-continuous mappings
  - vector coloring
- probabilistic method
- applications of semidefinite programming

## Selected students

- Radek Hušek, PhD advisor (since 2014)
- Peter Korcsok, MSc advisor (due to defend in 2015), second prize in student scientific competition SVOČ 2014
- Tomáš Pavlík, MSc advisor (due to defend in 2015)
- Hana Bílková, MSc advisor (due to defend in 2015)
- Lucie Mohelníková, MSc advisor (defended in 2014)
- Jan Voborník, Bc advisor (defended in 2013)
- Hana Bílková, Bc advisor (defended in 2012)
- Jan Hladký, Bc advisor (defended in 2006), first prize in student scientific competition SVOČ 2007