Curriculum Vitae

Name: RNDr. Miroslav Šiman, Ph.D.

Date of birth: December 13, 1978 **E-mail:** siman@utia.cas.cz

Recent Education and Experience

2014–2019, 2021– **Principal researcher** (projects GA14-07234S, GA17-07384S, and GA21-05325S)
2010– **Research** at ÚTIA (2010–2011 postdoctorand, 2012– research fellow)
The Czech Academy of Sciences, Institute of Information Theory and Automation (ÚTIA)
2006–2009 **Postdoctoral Research** at ECARES/ULB in Belgium (with Davy Paindaveine and Marc Hallin)
European Centre for Advanced Research in Economics and Statistics (ECARES/ULB)
2002–2006 **PhD Study in Econometrics and Operational Research** (Charles University)

Recent Publications in Books or Impact-Factor Journals

[01] Multivariate quantiles and multiple-output regression quantiles: from L1 optimization to halfspace depth (with M. Hallin and D. Paindaveine), Annals of Statistics 38, 635–669 (2010).
[02] Rejoinder (to [S1]) (with M. Hallin and D. Paindaveine), Annals of Statistics 38, 694–703 (2010).
[03] On directional multiple-output quantile regression (with D. Paindaveine). Journal of Multivariate Analysis 102, 193–212 (2011).
[04] On exact computation of some statistics based on projection pursuit in a general regression context. Communications in Statistics – Simulation and Computation 40, 948–956 (2011).
[05] Analyzing growth trajectories (with I. W. McKeague, S. López-Pintado, and M. Hallin). Journal of Developmental Origins of Health and Disease 2, 322–329 (2011).
[06] Computing multiple-output regression quantile regions (with D. Paindaveine). Computational Statistics & Data Analysis 56, 840–853 (2012).
[07] Computing multiple-output regression quantile regions from projection quantiles (with D. Paindaveine). Computational Statistics 27, 29–49 (2012).
[08] On Kendall's autocorrelations. Communications in Statistics – Theory and Methods 41, 1733–1738 (2012).
[09] On elliptical quantiles in the quantile regression setup (with D. Hlubinka). Journal of Multivariate Analysis 116, 163–171 (2013).
[10] Precision index in the multivariate context. Communications in Statistics – Theory and Methods 43, 377–387 (2014).
[11] Multivariate process capability indices: a directional approach. Communications in Statistics – Theory and Methods 43, 1949–1955 (2014).
[12] On generalized elliptical quantiles in the nonlinear quantile regression setup (with D. Hlubinka). TEST 24, 249–264 (2015).
[13] Local bilinear multiple-output quantile/depth regression (with M. Hallin, Z. Lu and D. Paindaveine). Bernoulli 21, 1435–1466 (2015).
[14] Elliptical multiple-output quantile regression and convex optimization (with M. Hallin). Statistics & Probability Letters 109, 232–237 (2016).
[15] Directional quantile regression in Octave (and MATLAB) (with P. Boček). Kybernetika 52, 28–51 (2016).
[16] Directional quantile regression in R (with P. Boček). Kybernetika 53, 480–492 (2017).
[17] On weighted and locally polynomial directional quantile regression (with P. Boček). Computational Statistics 32, 929–946 (2017).
[18] Multiple-output quantile regression (with M. Hallin). In: R. Koenker, V. Chernozhukov, X. He, L. Peng (eds) Handbook of Quantile Regression, 185–208 (2017).
[19] Parametric elliptical regression quantiles (with D. Hlubinka). REVSTAT 18, 257–280 (2020).
[20] Incomplete interdirections and lift-interdirections (with Š. Hudecová and J. Klicnarová). Journal of Nonparametric Statistics 32, 93–108 (2020).
[21] Testing axial symmetry by means of directional regression quantiles (with Š. Hudecová). Electronic Journal of Statistics 15, 2690–2715 (2021).
[22] Testing symmetry around a subspace (with Š. Hudecová). Statistical Papers 62, 2491–2508 (2021).
(+ a few manuscripts tentatively accepted or under review)

Two software packages: modQR for R + moQuantile for Octave/Matlab

Web of Science/Publons: h-index 8, total times cited 258 **Google Scholar:** h-index 10, i-index 10, citations 489