Resume

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Education:

- (2010-present) New Jersey Institute of Technology – applied mathematics, PhD candidate
- (2008-2010) Comenius University, Slovakia – MSci in mathematics, Thesis topic: Mathematical Structure of the "Lights Off" Game and Simulation of the Winning Strategies
- (2005-2008) Comenius University, Slovakia – BSci, mathematics major

Certificates:

Data Science Specialization Certificates:

- R Programming by Johns Hopkins University on Coursera. Certificate earned on February 1, 2015 (https://www.coursera.org/account/accomplishments/records/uT2VQFg4A9ZKEN9Q)
- Getting and Cleaning Data by Johns Hopkins University on Coursera. Certificate earned on March 1, 2015 (https://www.coursera.org/account/accomplishments/records/9MDaM8xXdwMDkpgg)
- Exploratory Data Analysis by Johns Hopkins University on Coursera. Certificate earned on March 29, 2015 (https://www.coursera.org/account/accomplishments/records/KAvJfrsRtVwz2FRN)
- Reproducible Research by Johns Hopkins University on Coursera. Certificate earned on May 3, 2015 (https://www.coursera.org/account/accomplishments/records/LP8tBeUJT5huTXpm)
- Statistical Inference by Johns Hopkins University on Coursera. Certificate earned on May 31, 2015 (https://www.coursera.org/account/accomplishments/records/M2knmX2ZCzYYnbAU)
- Regression Models by Johns Hopkins University on Coursera. Certificate earned on June 28, 2015 (https://www.coursera.org/account/accomplishments/records/dQzUmREBJXHX9t8L)
- Practical Machine Learning by Johns Hopkins University on Coursera. Certificate earned on August 1, 2015 (https://www.coursera.org/account/accomplishments/records/UtykhRDzEe7WSsR9)

Job Experience:

- (2007-2009) SAP Junior consultant at MPI Slovakia (now part of Asseco Group)

Interests: Big Data Analysis, Machine Learning

Research Interests:

Molecular Dynamics Simulations of the Granular Matter, Force Networks, Percolation and Jamming Transition, Universality of the Scaling Laws, Wave Propagation in Granular Matter

Computer Skills:

- UNIX/Linux & Windows environment

Programming Languages:

- Fortran 90, C++, R, Python
- basic knowledge of shell script

Papers:

- *Percolation and jamming transitions in particulate systems with and without cohesion* (L. Kovalcinova, A. Goullet, L. Kondic, http://arxiv.org/abs/1502.)
- *Scaling of Force Networks for Compressed Particulate Systems* (L. Kovalcinova, A. Goullet, L. Kondic, paper in preparation)
- *Statistical properties of force networks in particulate systems with and without cohesion* (L. Kovalcinova, A. Goullet, L. Kondic, paper in preparation)

- *Micro and Mesostructural Signatures of Shear Jamming in a 2D Frictional Disk Packing* (J. A. Dijksman, J. Ren, L. Kovalcinova, M. Kramar, K. Mischaikow, L. Kondic, R. P. Behringer, paper in preparation)
- *Energy dissipation in sheared wet granular piles* (S. Karmakar, M. Schaber, A.-L. Hippler, L. Kovalcinova, M. Scheel, M. DiMichiel, S. Herminghaus, M. Brinkmann, R. Seemann and L. Kondic, paper in preparation)

Teaching:

- (Spring 2013) Calculus I (NJIT)

Attended Workshops and Presentations:

- *Scaling of Force Networks for Compressed Particulate Systems*, The 3rd Northeast Complex Fluids and Soft Matter Workshop, NJIT, January 2015
- *Scaling of Force Networks for Compressed Particulate Systems*, APS March Meeting, San Antonio, March 2015
- *Percolation in Compressed Particulate Systems*, Dana Knox Research Showcase, NJIT, April 2015
- *Scaling of Force Networks for Compressed Particulate Systems*, The 4rd Northeast Complex Fluids and Soft Matter Workshop, Stony Brook, June 2015
- *Characterizing dense granular systems by percolation and statistical properties of force networks*, (oral presentation), PASI on Particulate Media, La Plata, Argentina, August 2014
- *Characterizing dense granular systems by percolation and statistical properties of force networks*, (oral presentation), APS March Meeting, Denver, CO, March 2014
- *Properties of force networks of slowly compressed granular matter*, (poster) Graduate Research Day, NJIT, Newark, NJ, October 2013
- Graduate Student Mathematical Modeling (GSMM) Camp at RPI, Troy, NY, June 2013 Mathematical Problems in Industry (MPI) Workshop, Worcester Polytechnic Institute, MA, June 2013
- *Properties of force networks of slowly compressed granular matter*, (poster), Frontiers in Applied and Computational Mathematics, Newark, NJ, May 2013
- *Properties of force networks of slowly compressed granular matter*, (poster), Soft Solids and Complex Fluids Summer School, University of Massachusetts, Amherst, MA, June 2012
- CSCAMM Summer School on Granular Flows: From Simulations to Astrophysical Applications, University of Maryland, MD, June 2011

Awards:

- (2015) Dana Knox Research Showcase, NJIT, 3rd place graduate presentation award
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- (2007, 2008) Scholarship for the top 5% of students at the Comenius University
- (2004, 2005) First and Second place at the County Level of Math. Olympiad, member of the National Level of Math. Olympiad

Volunteer work:

- (Fall 2006Fall 2010) Organizing Math. Seminars (Slovakia), Mathematical Camps & Talks

Relevant Skills:

analytical and critical thinking, implementation skills, experienced teamworker ability to quickly gain new technical skills and relevant education

Languages:

Slovak (native speaker), English, Czech, German(Beginner), Spanish(Beginner)