

# Curriculum Vitæ

**Name:** Alexander Schmidt

## Contact information

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## Degrees

- PhD Candidate Mechanical Engineering. Lipetsk State Technical University, Lipetsk, Russia, 2012-Present. GPA 3.97. Dissertation Title: Computer simulation of drawing processes of sheet materials (Expected graduation date: fall 2012) Advisor: Dr. Vladimir Volodin.
- Ms.Sc. Mechanical Engineering. Lipetsk State Technical University, Lipetsk ,Russia, 2001.

## Research Interests

1. Computer simulation and optimization of the plastic deformation,
2. Finite element methods, parallel and generic algorithms.

## Refereed journal publications

1. Principles of Conditional Technology Optimization in Sheet Metal Forming, Science and Technology. Selected Works of Russian Schools. Technology and Machines for Forming. Russian Academy of Sciences, Moscow, Russia 2005. pp. 70-73 (rus)
2. Using General-Purpose Finite Element Method System For Solving Three-dimentional Sheet Forming, Technology and Machines for Forming, Moscow, Russia, 2005. pp. 74-77. (rus)
3. Numerical Prediction and Sequential Process Optimization in Sheet Forming Based on Genetic Algorithm. Materials and Manufacturing Processes, 2011

## Refereed conference publications

1. Developing a Cloud-based Virtual Machine, CloudSlam 2009
2. Specifics of the Flange Deformations During Deep Drawing Processes. 6th National Russian Conference "Modern Technologies in Machine Building", 2003, Penza, Russia, 202-204 pp. (rus)
3. Step to the Future Conference, 2002, Lipetsk, Russia (rus)

4. Parallel Multi-Constrained Partitioning Schemes Applied to the Problems of Deep Drawing Processes of Sheet Metal. International Conference on Computational & Experimental Engineering and Sciences, Mar 28-Apr 1, 2010, Las Vegas, NV, USA, pp. 365-377
5. Migration of Traditional Business Rule Applications to the Cloud. Cloud Lab 2010, April 19-23, 2010

## **Conference and workshop participation**

1. Nanoscale analysis of plasticity and fracture of the sheet metal. International Conference on Computational Science, ICCS 2012.

## **Awards and Grants**

1. Intel Excellence in Computer Science Award, 2002.
2. Step to the Future Honor, 2002, The 5th Regional Scientific and Engineering Symposium "Step to the Future".

## **Teaching experience**

1. Mechanical Engineering, Dept. of Mechanical Engineering, Lipetsk State Technical University, Lipetsk, 2001-2004.

## **Other professional activities**

- Referee for Scientific Research and Essay;
- Microsoft Certified Professional Various Specializations, 1998--.

## **Programming experience**

- .Net, C#, C++, Python, Fortran 90;
- MPI;
- MSC.Marc, MATLAB, Mathematica.

## **Languages in order of fluency**

- English
- Russian
- German