

# KANG LI

Siemens PLM Software Inc. – Ames, IA 50010 – USA

✉ kang.li@siemens.com 🌐 www.kangli.me

## Specialties

**CAD/CAM** Additive Manufacturing, Shape Optimization, Topology Optimization

**Geometric Modeling/Processing** NURBS, Polygon Mesh, Point Cloud, Images

**Artificial Intelligence** Statistical Shape Model, Machine Learning, Computer Vision

**Numerical Methods** Finite/Boundary Element Method, Isogeometric Analysis

## Experience

### Siemens PLM Software Inc.

Advanced Software Engineer

**Ames, IA**

2015.07~ Present

- Maintain Direct Model visualization toolkit and industry standard JT file format
- Develop new visualization technologies: Ultra-Lightweight Precise (ULP) format

### Siemens Corporation, Corporate Technology

Research Intern - Geometric Modeling and Analytics

**Princeton, NJ**

2014.06~2014.08

- Developed algorithms for NX 3D printing module and filed 1 invention disclosure

### Illinois Institute of Technology

Research Assistant - Computational Design and Manufacturing

**Chicago, IL**

2009.01~2015.05

- Researched 3 projects and engaged in teaching for 3 courses
- Published 5 journal and 4 conference papers, and won 4 best paper awards

## Education

### Illinois Institute of Technology

Ph.D. in Mechanical Engineering

**Chicago, IL**

2009.01~2015.05

### Tongji University

B.S. & M.S. in Mechanical Engineering

**Shanghai, China**

2001.09~2008.03

## Skills

**Programming** C/C++, MATLAB, FORTRAN; OpenGL, NX Open, Parasolid  
Visual Studio, Xcode; LaTeX, HTML/CSS

**Software** NX, Teamcenter Visualization, ProE, Solidworks, Rhino3D, AutoCAD, Mimics;  
Abaqus, ANSYS, COMSOL, Hypermesh; Geomagic; Photoshop, Illustrator

## Awards

**Prakash Krishnaswami CAPPD Best Paper Award**

**Buffalo NY, Chicago IL, Montreal Canada**

ASME IDETC/CIE Conferences

2010.08, 2012.08, 2014.08

**Best Paper Award, First Place**

**Orlando, FL**

SIAM/ACM GD/SPM Joint Conference

2011.10

## Publications

- "Direct Diffeomorphic Reparameterization for Correspondence..." *Computer-Aided Design*, 2015.
- "Covariance Matrix of A Shape Population: A Tale on Spline Setting" *Computers & Graphics*, 2015.
- "Toward Patient-Specific Computational Study of Aortic Diseases..." *ASME IDETC/CIE Conference*, 2014
- "Direct Geomery Processing for Tele-Fabrication." *J. Computing & Information Science in Engr.*, 2012
- "Isogeometric Analysis and Shape Optimization via Boundary Integral" *Computer-Aided Design*, 2011.
- "Topologically Enhanced Slicing of MLS Surfaces" *J. Computing & Information Science in Engr.*, 2011