

# KANG LI

Siemens Digital Industries Software Inc.  
✉ kang.li@siemens.com  
🌐 www.kangli.me



## Expertise

<b>Graphics Rendering</b>	Physically Based Rendering(PBR), Virtual/Augmented Reality(VR/AR)
<b>CAD/CAM/CAE</b>	3D Printing, Shape/Topology Optimization, FEM/BEM, Isogeometric Analysis
<b>Geometric Modeling</b>	B-Rep (Parasolid), NURBS, Polygon Mesh, Point Cloud
<b>Artificial Intelligence</b>	Statistical Shape Model, Machine Learning, Computer Vision

## Experience

<b>Siemens Digital Industries Software Inc.</b> - Software Engineer	<b>2015.07~Present</b>
○ Maintenance: Direct Model, JT format, Parasolid Support	Ames, IA
○ Physically Based Rendering (SVM), B-Rep (ULP), WebAssembly (UPCS)	
<b>Siemens Corporate Technology</b> - Research Intern	<b>2014.06~2014.08</b>
○ Optimized build orientation in 3D printing for Siemens NX	Princeton, NJ
<b>Illinois Institute of Technology</b> - Research Assistant	<b>2009.01~2015.05</b>
○ Published 5 journal and 4 conference papers, and won 4 best paper awards	Chicago, IL

## Education

<b>Illinois Institute of Technology</b>	<b>2009.01~2015.05</b>
Ph.D. in Mechanical Engineering	Chicago, IL
<b>Tongji University</b>	<b>2001.09~2008.03</b>
B.S. & M.S. in Mechanical Engineering	Shanghai, China

## Skills

<b>Programming</b>	C/C++, MATLAB, FORTRAN; OpenGL, NX Open, Parasolid Visual Studio, Xcode; LaTeX, HTML/CSS
<b>Software</b>	NX, Teamcenter Visualization, Pro/E, Solidworks, Rhino3D, AutoCAD, Mimics; Abaqus, ANSYS, COMSOL, Hypermesh; Geomagic; Photoshop, Illustrator

## Awards

<b>Prakash Krishnaswami CAPPD Best Paper Award</b>	<b>2014.08, 2012.08, 2010.08</b>
ASME IDETC/CIE Conferences	Buffalo, Chicago, Montreal
<b>Best Paper Award, First Place</b>	<b>2011.10</b>
SIAM/ACM GD/SPM Joint Conference	Orlando, FL

## Patents & Publications

- ▷ "Systems and Methods for Lightweight Precise 3D Visual Format" *US. Patent Published*, 2019.11
- ▷ "Build Orientations for Additive Manufacturing" *US. Patent Published*, 2016.03
- ◇ "Direct Diffeomorphic Reparameterization for Correspondence..." *Computer-Aided Design*, 2015
- ◇ "Covariance Matrix of A Shape Population: A Tale on Spline Setting" *Computers & Graphics*, 2015
- ◇ "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