

# Curriculum Vitae

## Li Han (PhD candidate)

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**Research Institute:**

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### Research Interests

- Numerical Analysis and Scientific Computing
- Geometric and Physically-Based Modeling
- Dynamical Systems
- Homan Computer Interaction Technique
- Bioinformatics: image retrieval and 3D reconstruction

### Technical Skills

- Strong background in algorithm analysis and image processing
- 4 years research in computer graphics
- Extensive experiences in these computer technologies:
  - C/C++/MFC, OpenGL
  - Opencascade, ACIS, and OpenInventor etc. 3D toolkits programming
  - SQL

### Education

**Ph.D. Computer Science, (current)**

Trento University (Information and communication technology Faculty)  
Research Topic: Interactive Shape Modeling and Dynamic Deformation based on Spline Sculpting  
Advisor: Prof Raffaele.De.Amicis

**M.S. Computer Science, July 2002**

LiaoNing Normal University, DaLian, P.R. China  
Thesis topic: Intelligent Algorithm for Basic Conic Geometry Generation base on Hexagonal Grid and Innovative Anti-aliasing Technique  
Cumulative GPA: 4.0/4.0

**B.S. Computer Science, July 1996**

LiaoNing Normal University, DaLian, P.R. China  
Cumulative GPA: 94.5%

## Research Experience

**Graphitech, Italy, the member of INI-GraphicsNet (01/2004 – supposed to be 03/2007)**  
**Supervisor: Raffaele De Amicis**

Geometric Modeling, Curve and Surface, HCI, Virtual Reality Environment,

- Free form shape modeling based on sketching
  - Basic 2D Stroke Recognition
  - Sketch-based 3D objects Modeling
  - Spline-based Free Form Surface Modeling
  - Spline-based Dynamic Deformation
- Get involve in EU project “ AIM@SHAPE and IMPROVE”

**Laboratory 3S in INPG, Grenoble , France (01/05/2006- 31/10/2006)**  
**Supervisor: Jean Claude Leon**

Semantic-based curve manipulation; Physically-based deformation

- Symbolic curve representation based on Leyton process grammar
- Curve properties detecting based on the analysis of the curvature plot
- Dynamic Nurbs curve's curvature computing and constraints minimization
- The definition of Aesthetic Curve Operators for car styling

## Teaching Experience

**Computer and Information Technology College, Liaoning Normal University,**  
**01/1996 – 08/2002 (as a lecturer, as an associated professor after 2006)**

Fundament of Computer Graphics (1999-2002)

Algorithm Analysis (1997-2002)

Computer Programming in C (1996-1999)

Data Structure (1996)

Theory of Database (1996)

## International Conference Publications

### **Spline-Based Shape Modeling**

**Li Han**, Giuseppe Conti, EuroGraphics Italian Chapter, Italy, 2007 (In Review)

### **Interactive Spline-Driven Deformation for Shape Modeling**

**Li Han**, Raffaele. De. Amicis, Giuseppe Conti, ACM Solid and Physical Modeling Symposium, 2006, Wales, UK, 139 – 147.

### **Adaptive Constraint and 3D Sketch-based Deformation for Interactive Free Form Surface Styling**

**Li Han**, Raffaele. De. Amicis, Giuseppe Conti, In the International Conference of Computer Graphics Theory and Applications, 392-399, 2006, Portugal.

### **Responsive Interaction Base on Sketch in Conceptual Styling**

**Li Han**, Raffaele. De. Amicis, Giuseppe Conti, HCI ( Interact 2005) IFIP TC13 International Conference, Springer, 94-105. 2005 (and it is selected to put in journal of INIGraphicsNet 2005).

**Freehand 3D Curve Recognition and Oversketching**

**Li Han**, Giuseppe Conti, Raffaele. De. Amicis , Eurographics UK Chapter ,187-193. 2005, Canterbury, UK.

**A Novel Approach to Free-form 3D Curve and Surface Sketching for Conceptual Styling**

**Li Han**, Giuseppe Conti, Raffaele. De. Amicis. "Mathematics and Art ", Calabria, Italy 2005

**Journal Publications**

**Spline-driven Deformation for Interactive Shape Modeling**

**Li Han**, Giuseppe Conti, Raffaele. De. Amicis , **Computer & Graphics** , 2007 ( In Review).

**Sketch-based Intelligent Shape Modeling System for Conceptual Designing**

**Li Han**, Giuseppe Conti, In INIGraphicsNet Topics ,33-35, May, 2005.

**Intelligent 3D Curve Sketching for B-Spline Surface Modeling**

**Li Han**, Di Tang, Computer Engineer and Design, January, 2006, China

**Semantic-enabled System for Intelligent Shape Handling**

**Li Han**, Di Tang, Computer Engineer, January, 2005, China

**Sketch-based Intelligent Geometric Modeling System**

**Li Han**, Di Tang, Computer Engineer and Application, July, 2005, China

**A Rapid Algorithm for Anti-aliasing of Line Drawing**

**Li Han**, Di Tang, Mini-Micro Systems ,January, 2004 China

**A Rapid Algorithm for Generation of Ellipse Base on Hexagonal Grid**

**Li Han**, Di Tang, Computer Software and Application , November, 2003 China

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**Relevant course work**

PhD	Graduate	Undergraduate
Fundamentals of Computer Graphics and Geometric Modeling (A+)	Design and Analysis of Algorithms (A+)	Theory of Compiler Design
Object-oriented 3D Graphics Programming (A+)	Computer Networks (A)	Discrete Structures
Human Computer Interaction (A)	Image Processing (A)	Computer Programming in C
Research Methodology (A)	Computer vision (A+)	Software Engineering ;
Speech Recognition (B+)	Operating System Principles (B)	Digital Circuit Design; Artificial Intelligence;
Conceptual Modeling (B+)	Compute Geometry (A+)	Database Management System
Knowledge representation (A)	Internet Protocols (A-) Graph Theory (excellent)	Computer Organization; Advanced Computer

		Architecture; Data Structures and Programming Methodology; File Processing And Information System; Computer Graphics; Functional Programming;
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### **Honors and Awards:**

- Scholarship in Trento University. Italy.
- Awarded excellent lecturer prize among 500 lecturers in LiaoNing Normal University from (1997-2000). China
- Stood Rank top 10 among 2,000 graduated candidates who competed for the position of assistant Lecturers in LiaoNing Normal University in 1996. China
- Ranked among top 5 students for the excellent practice in 1995, China.
- Serve as a chair of student association in computer science department of LiaoNing University from 1993-1995.
- Awarded excellent student prize in LiaoNing Normal University from 1992-1996, China.

### **Objective:**

Seeking a challenging researcher position to enhance my research skills and extend knowledge area.