

Duo Li

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🌐 www.duo-li.com

EDUCATION

Sept.2010– **University of British Columbia (UBC)**, *Computer Science*, Vancouver, BC.

Mar.2013 **Master of Science in Computer Science (Thesis-based)**

– GPA: 4.0/4.3

– Supervisor: Dinesh K. Pai

Sept.2005– **Beijing Institute of Technology (BIT)**, *School of Software*, Beijing, China.

Jun.2009 **BSc(Eng) in Software Engineering**

– Graduated with the honor: *Outstanding Graduate of Beijing*

– GPA: 89/100, Rank: 7th/220, (1st/220 in the third year)

WORK EXPERIENCE

Oct.2015– **Software Engineer**, *Remarketing Ads Quality*, Google, Mountain View, USA.

Present

- My work brought Google \$\$ million ARR;
- My projects practically touched the complete Google display Ads training/serving stacks;
- Improved the accuracy of pCTR and pCVR model with better signals and infrastructure;
- Improved remarketing ads inventory with better user data interpretation.

July.2014– **Software Engineer/Tech Lead**, *Social Shopping Tech.*, Amazon, Seattle, USA.

Sept.2015

- Developed systems to extract product attributes (e.g. image quality attribute for camera product) and attribute-level sentiment summaries from customer reviews;
- Developed systems to massively collect product attribute ratings via user solicitation;
- Developed systems to consume above data to improve customer shopping experience;
- Developed infrastructures and algorithms to improve customer review ranking and star rating systems of Amazon.

Mar.2013– **Software Engineer**, *Social Shopping Tech.*, Amazon, Vancouver, Canada.

Jun.2014

- Developed systems to acquire and consume large amount of customer ratings cross desktop and mobile, our system collected millions of customer rating daily in live experiment. It also collected 10x of ratings compared with review.

Jun.2012– **Intern**, *Search Experience Team*, Amazon, Seattle, USA.

Aug.2012

- Data Analysis, algorithm design, and implementation of short null result queries handling;
- My project lead to several millions \$ of gross revenue in a month after launch.

Jan.2011– **Research Assistant**, *Sensorimotor Systems Lab*, UBC, Vancouver, Canada.

Mar.2013

- Biomechanical simulation of musculoskeletal systems with novel numeric methods

May 2009– **Research Assistant**, *State Key Lab of Virtual Reality*, Beihang Univ., China.

May 2010

- Virtual surgery simulation of blood and soft tissue

Nov.2006– **Co-founder**, *PanGu Gear Game Studio*, Beijing, China.

Jun.2009

- Casual game platform and 3D FPS game development

PUBLICATIONS

Duo Li, Shinjiro Sueda, Debanga R. Neog, Dinesh Pai, Thin Skin Elastodynamics, *In Proc.SIGGRAPH 2013, ACM Transaction on Graphics*, vol. 32, no. 4, [link],

Duo Li, Biomechanical Simulation of the Hand Musculoskeletal System and Skin,

MSc. Thesis, 2013, [link],

OTHER SELECTED PROJECTS

Jun.2012– **Short Null Result Query Correction**, *Intern Project*, Amazon.

- Aug.2012
- Analyzed short null result user search queries and designed several correction strategies
 - Designed and implemented 3 versions of word splitting algorithms and generated data for other corrections

Simulation, Animation & Machine Learning

Mar.2012– **Thin skin elastodynamics**.

- Feb.2013
- Developed a novel method to simulate the skin as high constrained thin elastodynamic material with Eulerian discretization to overcome the drawbacks of traditional Lagrangian or kinematic skin simulation
 - This methods is both fast and physically realistic

Sep.2011– **Anatomically based Hand Simulation**.

- Jan.2012
- Developed a complete physics engine including strand based muscle simulator, rigid body dynamics, staggered projection based friction, basic collision detection and etc.
 - A complete pipeline includes C++ simulator, Blender modeling plugin, and render plugin

Mar.2011– **Reinforcement Learning in Latent Space: Data Driven Inverse Kinematics**.

- May 2011
- Developed a method to handle 'the curse of dimensionality' problem in reinforcement learning with Gaussian Process Latent Variable Model (GPLVM) for Inverse Kinematics

Sep.2011– **Learning to Jump with Muscles**.

- Oct.2011
- Auto-generating jumping movements of input musculoskeletal models with Covariance Matrix Adaptation (CMA)

Games & Tools

Jun.2007– **Survive: A 3D FPS Game and a compact engine**.

- Oct.2007
- Developed a compact game engine, and a 3D FPS game 'Tank Battle' based on this engine

Nov.2006– **XJOY Game Arena**.

- Jan.2007
- Developed a casual platform for mini multiplayer games and mini games upon this platform

TECHNICAL SKILLS

Programming C/C++, JAVA (Proficient); Javascript; MATLAB, C#, PHP, SQL, Perl

Tools & SDK AWS Systems, OpenGL, DirectX; Git, L^AT_EX, Blender, SVN, Perforce, Meshlab

SELECTED AWARDS & HONORS

Apr.2009 **Outstanding Graduate of Beijing**.

Issued by **Ministry of Education of Beijing & BIT**

Apr.2008 **National Scholarship**.

Issued by **Ministry of Education of China**

Apr.2008 **Microsoft Sci. and Tech. Innovation Student Award Scholarships**.

Issued by **Microsoft & BIT**

Apr.2008 **Microsoft Sci. and Tech. Innovation Group Scholarships**.

Issued by **Microsoft & BIT**

Apr.2007 **National Scholarship**.

Issued by **Ministry of Education of China**