

QI GUO

Robotics Institute, Carnegie Mellon University, Pittsburgh, PA 15213

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EDUCATION

Carnegie Mellon University Pittsburgh, PA, U.S.

- Master of Robotics, Robotics Institute *Aug 2014 - Aug 2016 (Expected)*
 - Intermediate Statistics (A) ◦ Convex Optimization (A) ◦ Statistical Machine Learning (A)

Tsinghua University Beijing, China

- Bachelor of Computer Software, School of Software *Sep 2010 - Jul 2014*
- Bachelor of Economics, School of Economics and Management *Sep 2011 - Jul 2014*

ETH - Swiss Federal Institute of Technology Zurich, Switzerland

- Exchange Student, Department of Computer Science (Informatik) *Feb 2013 - Aug 2013*

RESEARCH AND PROFESSIONAL EXPERIENCE

Carnegie Mellon University

Sep 2014 - Now

Research Assistant

Advised by Emma Brunskill, Jeffrey Bigham, Niki Kittur and Chinmay Kulkarni

- Questimator: Generating knowledge assessments for arbitrary topics (*Submitted to CHI 2016*)
 - Using Wikipedia text and graph structure, utilizing parsing and semantic embedding
- CrowdTutor: Using crowd-sourcing to collect and organize materials into coherent courses for arbitrary topics

HTC Beijing Research Center

Mar 2014 - Jun 2014

Research Intern

Advised by Deli Zhao

- Implemented a prototype system for social network sparse text sentiment analysis
- Used layered-SVM and topic modeling (LDA) for topic-weighted classification
- Applied the sentiment analysis result to behavioral finance. (*Distinct Economics Thesis*)

Internet Graphics Group, Microsoft Research Asia

Sep 2013 - Feb 2014

Research Intern

Advised by Fan Yang and Lvdi Wang

- Digital Barber: Virtual hair style mobile phone App, based on 3D hair strand reconstruction from single images
- Integrated the pipeline including feature detection, hair reconstruction from image, hair simplification etc.
- Designed hair strand model simplification algorithm, using K-means clustering and PCA

Computer Graphics Lab, ETH & Disney Research Zurich

Jun 2013 - Aug 2014

Research Assistant

Advised by Henning Zimmer & Markus Gross

- Optical flow estimation based on multi-spectral images, utilizing the wide-spectrum information

- With Gauss-Seidel Solver, accelerated by Successive Over-relaxation Method (SOR)

Computer Graphics & Computer-Aided Design Lab, Tsinghua University

Sep 2011 - Jan 2013

Research Assistant

Advised by Bin Wang

- Implemented variance shadow mapping using DirectX (GPU programming)
- Implemented a state-of-the-art algorithm for fast $O(1)$ bilateral filtering using trigonometric
- Led project 3D Scene Reconstruction from Plenoptic Camera Images

EXTRACURRICULAR PROJECT

Tsinghua *Share Course* SNS Application

Jun 2011 - Jan 2012

- A platform for Tsinghua students to share course information
- A Renren (Chinese substitution of Facebook) application with 2,000+ visitors/day at the peak
- Worked on the database and website OAuth API, participated in the architecture and UX design

HONORS AND AWARDS

Jingwei Innovation Fund Oversea Research Scholarship	<i>Jul 2013</i>
ETH Excellent Exchange Student Scholarship	<i>Feb 2013</i>
Excellent Talent Program - Entrepreneurial Track, SEM	<i>Jun 2012</i>
Outstanding Debater in 2011 Tsinghua University Debate Competition	<i>May 2011</i>
1 st Prize in National Physics Olympiad, Hebei, China (Exempted from College Entrance Exam)	<i>Oct 2009</i>

LEADERSHIPS AND VOLUNTEERS

Office Director, Minister	Student Union, School of Software	<i>2011 - 2013</i>
Vice Minister	Student Life & Right Section, Student Union, Tsinghua Univ.	<i>2011 - 2012</i>
Volunteer	SIGGRAPH Asia 2011, Hong Kong	<i>Dec 2011</i>
Teaching Assistant	Tsinghua Univ. Summer School for High School Students	<i>Jul 2011</i>
Teaching Assistant	Hengshui High School Physics Olympiad Team	<i>Feb-Jun 2010</i>

Miscellaneous:

Guitar Player, Basic-Level German Speaker, (FC Bayern) Soccer Fan