

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)

Tsinghua University Beijing, China

- Bachelor of Computer Software, School of Software
- Bachelor of Economics, School of Economics and Management

Sep 2010 - Jul 2014

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 Xiaoming Jin and 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 2013

Research Assistant

Advised by Henning Zimmer and 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	Jul 2013
ETH Excellent Exchange Student Scholarship	Feb 2013
Excellent Talent Program - Entrepreneurial Track, SEM	Jun 2012
Jiange Shen Scholarship	Oct 2012
Student Research Scholarship	Oct 2011
Outstanding Debater in 2011 Tsinghua University Debate Competition	May 2011
1 st Prize in National Physics Olympiad, Hebei, China (Exempted from College Entrance Exam)	Oct 2009

TEACHING AND SERVICES

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

Miscellaneous:

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