# Xiaolong ZHU

| | | |
|---|---|---|
| <span style="font-variant:small-caps">Contact<br>Information</span> | Room 411, CYC Bldg<br>Department of Computer Science<br>The University of Hong Kong<br>Hong Kong SAR | *Mobile:* +852−9768−5403<br>*Skype:* lucienzhu@hotmail.com<br>*E-mail:* lucienzhu@gmail.com<br>*WWW:* xiaolongzhu.org |

<span style="font-variant:small-caps">Research<br>Interests</span>

**Multimedia**, including *Sketch-based Image Retrieval*, *Human-Computer Interaction*;
**Computer Vision**, including *Gesture Recognition*, *Object Recognition*;
**Machine Learning**, including *Random Forest*, *Restricted Boltzmann Machine*, *Kernel Methods for SVM*.

<span style="font-variant:small-caps">Education</span>

**The University of Hong Kong**,                                    Hong Kong SAR, China

Ph.D. Candidate, *Computer Science*,                          **September 2010 - present**
- Adviser: Dr. Kenneth K. Y. Wong
- Area of Study: Sketch-based Interface for Computer Vision

**Peking University**,                                               Beijing, China

B.S., *Machine Intelligence*                                  **September 2006 - June 2010**
- Thesis Title: Segmentation and Classification of Range Image.
- *Excellent Undergraduate Thesis Award*.
- Advisor: Dr. Huijing Zhao

<span style="font-variant:small-caps">Publications</span>

[Refereed Conference Papers]

1. **Xiaolong Zhu**, Ruoxin Sang, Xuhui Jia and Kwan-Yee K. Wong. A Hand Shape Recognizer from Simple Sketches. *International Conference on Image and Vision Computing New Zealand (IVCNZ)*, 2013.

2. Xuhui Jia, **Xiaolong Zhu**, Angran Lin and Kwok-Ping Chan. Face Alignment using Structured Random Regressors Combined with Statistical Shape Model Fitting. *International Conference on Image and Vision Computing New Zealand (IVCNZ)*, 2013.

3. **Xiaolong Zhu**, Kwan-Yee K. Wong. Single-Frame Hand Gesture Recognition Using Color and Depth Kernel Descriptors. *IEEE International Conference on Pattern Recognition (ICPR)*, 2012.

4. Zhihu Chen, Kwan-Yee K. Wong, Yasuyuki Matsushita, **Xiaolong Zhu**, Miaomiao Liu. Self-Calibrating Depth from Refraction. *IEEE International Conference on Computer Vision (ICCV)*, 2011.

5. **Xiaolong Zhu**, Huijing Zhao, Yiming Liu, Yipu Zhao, Hongbin Zha. Segmentation and Classification of Range Image from an Intelligent Vehicle in Urban Environment. *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2010.

6. Huijing Zhao, Yiming Liu, **Xiaolong Zhu**, Yipu Zhao, Hongbin Zha. Scene Understanding in a Large Dynamic Environment through a Laser-based Sensing. *IEEE International Conference on Robotics and Automation (ICRA)*, 2010.

[Journal Papers]

1. Zhihu Chen, Kwan-Yee K. Wong, Yasuyuki Matsushita, **Xiaolong Zhu**. Depth from Refraction Using a Transparent Medium with Unknown Pose and Refractive Index. *International Journal of Computer Vision (IJCV)*, 2012.

| | | |
|---|---|---|
| TEACHING EXPERIENCE | **The University of Hong Kong**, | Hong Kong SAR, China |

*Teaching Assistant* **September 2013 - December 2013**

- Assisted Dr. Kenneth K.Y. Wong in Computer Programming and Applications;
- Provided office hours to first-year engineering students;
- Graded assignments on programming.
- Assisted Dr. Loretta Yi-King Choi in Topic in Computer Science: Visual Analysis.
- Designed tutorials for lab sessions.
- Graded assignments and assisted to evaluate final presentations of the students.

*Teaching Assistant* **September 2012 - December 2012**

- Assisted Dr. Kenneth K.Y. Wong in Computer Vision;
- Gave weekly tutorials to third-year students;
- Designed and graded assignments.

*Teaching Assistant* **September 2011 - December 2011**

- Assisted Dr. Chun Kit Chui in Computer Programming and Applications;
- Provided office hours to first-year engineering students;
- Graded assignments on programming.

*Teaching Assistant* **September 2010 - December 2010**

- Assisted Dr. Kenneth K.Y. Wong in Computer Programming and Applications;
- Provided office hours and tutorials to first-year engineering students;
- Graded assignments on programming.

**Peking University**, Beijing, China

*Undergraduate Research Assistant* **September 2008 - June 2010**
- Participated in the *POSS* project, in 3D VCR Lab;
- Analyzed range data using computer vision methods.

PROFESSIONAL EXPERIENCE **Lenovo IVC Lab**, Hong Kong SAR, China

*Research Intern* **June 2013 - August 2013**

- Innovated new ways for image searching.
- Designed a prototype of touch-based image retrieval system and demonstrated it to CTO.

**Microsoft Research Asia**, Beijing, China

*Research Intern* **June 2012 - September 2012**

- Learned HCI workflow of problem solving;
- Designed visual feedback for in-air gesture recognition.

**NetEase R&D.**, Beijing, China

*Software Engineer Intern* **June 2010 - August 2010**

- Coded web front-end of a Location-based Social Network Service;
- Cooperated with web designer.

HONORS & AWARDS
- Studentship of the University of Hong Kong, 2010-2013;
- Top 10 Undergraduate Thesis, School of EECS in Peking University, 2010;
- Wusi Scholarship in Peking University, 2009;
- Outstanding Volunteer in Beijing 2008 Olympic Games, 2008;
- First Class Honor in China Physics Olympic Games, Gansu, 2006.

TECHNICAL SKILLS
- Programming in: `C/C++`, `Matlab`, `JavaScript`, `Python`;
- Basic Experience in: `jQuery/HTML/CSS`, `Processing`, `UNIX Shell scripting`;
- Native Mandarin speaker, fluent in English, little Japanese and Cantonese;
- Operating Systems: Microsoft Windows family, Mac OS X.

SOCIAL ACTIVITIES
- Member of Information Technology Committee, The University of Hong Kong, 2011-2013;
- IT Officer of Postgraduate Association (PGSA) in The University of Hong Kong, 2011-2013;
- Volunteer as Media Assistant for Journalists in Games of the XXIX Olympiad, 2008.