

Tianwei Huang

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EDUCATION:

Sep/11–Present **Hong Kong University of Science and Technology**

- **Bachelor of Engineering in Computer Science and Engineering**
- GPA: 3.969 Rank top 1 percent
- Scholarships: School of Engineering Scholarship, Department of Computer Science and Engineering Scholarship, Continuing Undergraduate Scholarship
- Awards: Dean's List (four times), Academic Excellence Award (two times)

Feb/14–May/14 **University of Illinois at Urbana-Champaign**

- **School of Engineering Department of Computer Science Exchange Non-Degree Program**

RESEARCH EXPERIENCE:

Sep/14–Present **Point-based Rendering System for Gigabyte Level Datasets**

- **Location: Hong Kong University of Science and Technology (HKUST)**
- **Supervised by Professor Long Quan**
- Design and implement a point-based rendering WebGL application to fulfil the need of quick response to perspective change of 3D city-scale datasets.
- Still in development phase.

Jun/14–Aug/14 **4D Light-field Reconstruction and Signal Compression**

- **Location: Massachusetts Institute of Technology (MIT)**
- **Supervised by Professor Dina Katabi**
- Reference link: <http://groups.csail.mit.edu/netmit/LFSparseRecon/>
- Designed and implemented a light-field reconstruction program, which takes advantage of the sparseness of signal's frequency spectrum and compresses the time domain data to several recoverable frequency domain peaks.

Aug/13–Jan/14 **Overlay and Peer-to-peer Multimedia Streaming**

- **Location: Hong Kong University of Science and Technology (HKUST)**
- **Supervised by Professor Shueng-Han Gary Chan**
- Reference link: <http://streamphony.com/stream/>
- Designed and implemented a monitor for a video-on-demand system, which includes functionalities like checking peer server state, load-balancing on different servers and buffer decision.
- Used PHP to implement peer-to-peer multi-level server usage information passing.

Aug/12-Jun/13 **System Software for General-purpose Clouding Computing Substrate**

- **Location: Hong Kong University of Science and Technology (HKUST)**
- **Supervised by Professor Lin Gu**
- Reference link: <http://www.lazero.net/>
- Designed a scheduling algorithm based on delay scheduling and local storage information to improve data locality on general cloud computing.
- Used C-like language to implement the scheduler which focused on improving data locality with previous running results.

EXTRACURRICULAR ACTIVITIES:

Jan/14-Feb/14 **Huangshan Service Learning Trip**

- Provided volunteer service at Huangshan in Anhui Province China, including holding games and delivering teaching sessions for local primary school students.
- Held tutorials to help local children learn about basic knowledge of computer and Internet, and helped local families to setup home network.

Aug/12-Aug/13 **Promotion Secretary, Executive Committee of Mainland Student and Scholar Society**

- Participated in planning and executing over 10 academic enrichment activities including inviting famous researchers to give speeches on campus and firm visits.
- Built up website and managed the Facebook page for the society promotion.

TECHNICAL SKILLS:

- C/C++, Java, Matlab, openGL Programming
- Web Programming: HTML, CSS, Javascript, PHP/SQL