

EDUCATION

Bachelor of Science in Engineering, Computer Science and Technology

Tsinghua University, Beijing, China

August 2010 – July 2015 (Expected)

- Major GPA 92/100, ranked 4th out of 123
- Courses included Data Structure, Computer Architecture, Operating Systems, Compilers

Undergraduate Exchange Program, Computer Science

University of Texas at Austin, Austin, TX

August – December 2013

- GPA 4.0 with University Honors
- Courses included Computer Organization and Architecture, Software Engineering, Digital Signal Processing

RESEARCH EXPERIENCE

Full-time Intern

February 2014 – Present

Systems Research Group, Microsoft Research Asia, Beijing, China

- Distributed CUDA system by the name of Minerva/Athena. Designed for rapid training of deep neural networks.
- Contributed a major part of the code, consisting of interface design, memory and thread management, scheduling.
- Devised a technique to speed up convolution by up to 50%.
- Explored the details of different machine learning algorithms currently in use.

Group Researcher

February 2014 – Present

IPv6 Evaluation Systems, Tsinghua University, Beijing, China

- Conducted on the CERNET backbone network. Designed to better present current network status.
- Measured IPv6 network and its BGP routing deployment and performance, using Quagga mainly for data capturing.
- Wrote extensively in asynchronous CoffeeScript for the back end RESTful server.

Group Researcher

February – August 2013

4over6 Transitional Technology Group, Tsinghua University, Beijing, China

- Developed DHCP servers and clients to work under 4over6 tunnels.
- Explored transitional methods from IPv4 to IPv6 networks.

Group Researcher

June 2011 – February 2013

Cognitive Integration of Visual and Auditory Information Program, Tsinghua University, Beijing, China

- Conducted research to identify event-related potentials of human brain under specific stimulations.

PROJECTS

Athena, a fast and flexible system for deep learning.

February 2014 – Present

- Support for multiple CUDA devices, and user-defined operations.
- Featured a user-friendly Python frontend. Designed for machine learning researchers.
- Programmed for CUDA, at a much lower level of abstraction to achieve maximum performance.

World Crisis Database, a course project for software engineering.

October – December 2013

- A website that emulated IMDB in displaying worldwide crises and related people and organizations.
- Used front end MVC framework AngularJS, and featured back end RESTful service using Python, Django, and MySQL.

A Ray Tracer Engine and a Mesh Simplifier, a course project for computer graphics.

February – July 2013

- Featured a BSP tree for complex models.
- Support for reflection, refraction, texture, and much more.
- <https://github.com/hotpxl/fundamentals-of-computer-graphics>

AWARDS

National Scholarship

2014

National Scholarship

2013

University Honors

2013

Social Work Scholarship

2011