

HU, YIXUAN Y.H. 胡以璇

Curriculum Vitae

🏠 Shatin, New Territories, Hong Kong S. A. R.
📞 +(852) 6213 4882
✉ huyixuanhyx@gmail.com
🌐 http://yeephycho.github.io

EDUCATION

2014 – 2015 **Master of Science**
TELECOMMUNICATIONS
The Hong Kong University of Science & Technology

2010 – 2014 **Bachelor of Economics**
FINANCE
Harbin Institute of Technology

2009 – 2013 **Bachelor of Engineering**
TRAFFIC INFORMATION & CONTROL ENGINEERING
Harbin Institute of Technology

PROFESSIONAL SKILLS

Professional Skills **C/C++**, **PYTHON**, Native **JAVA**,
OpenCL, **CUDA**, **OpenGL**,
OpenMP, **Pthread**, **BLAS**,
Neon Instruction Set, **SSE**,
OpenCV, **Tensorflow**, **Torch7**

Background Skills **Digital Signal Process**, **MATLAB**,
Linux, **MacOS**, **Windows**,
LaTeX, **Markdown**, **MS Office**

Basic Skills **Lua**, **VERILOG**, **Assembly language**,
Protocol Buffers, **SWIG**, **Bazel**,
Android, **Git**, **FPGA**, **ARM**

PROFESSIONAL KNOWLEDGE

PARALLEL COMPUTING **SIMD**, **MIMD** programming, **Neon**
intrinsic optimization, concurrent
design & **GPU computing**.

MACHINE LEARNING **Deep Convolutional Neural**
Networks, **MLP**, **AlexNet**,
GoogleNet, **Inception**, **ResNet** etc.

MEMORY SYSTEM **Modern Memory System**, **Bus System**,
Cache System. Practical exp.
to optimize software memory access.

PROCESS MANAGEMENT **Unix-like OS** process management,
fit software to un-symmetric
Big-Little CPU architecture.

WORK EXPERIENCE

CURRENT, FROM FEB. 2017
Hong Kong Applied Science & Technology
Research Institute

Multimedia Processing Engineer

Focus on portable real time computer vision system and
deep learning applications

Fast 360 Degree Panoramic Image Stitching on Android

Key word: OpenMP, Neon, Real time embeded VR

Stitching images from two fish eye camera together to form
a 360 degree view image for real time VR live broadcast

Pedestrian Tracking for Smart Surveillance

Key word: CNN, Deep Learning, Asynchronous Computing

Apply deep learning on high accuracy real time pedestrian
monitoring

FEB. 2017, FROM JUL. 2015
TCL Corporate Research, Hong Kong

High Performance Computing Engineer

Responsible for computer vision algorithms acceleration,
SIMD design, **GPU** software design and multi-processor
algorithm design, from server to mobile.

Balance algorithm performance and hardware resource
occupancy & energy consumption.

MISCELLANEOUS

- **Githuber**, hacker spirit, programming lover
- Interested in Kant philosophy and Metaphysics
- Critical and creative thinking, good logic stringency
- Photographer, visual arts fan
- Cumulative blood donation 1600 cc