

## EDUCATION

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- **Carnegie Mellon University** Pittsburgh, PA  
*Master of Science in Electrical and Computer Engineering; GPA: 3.89* *Jan. 2017 – Present*
  - **Huazhong University of Science and Technology** Wuhan, China  
*Bachelor of Science in Opto-information Science and Technology; GPA: 3.90* *Sep. 2012 – June. 2016*

## EXPERIENCE

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- **Carnegie Mellon University** Pittsburgh, PA  
*MS Research Intern @ CyLab* *Sep 2017 - Present*
  - **Carnegie Mellon University** Pittsburgh, PA  
*Grad Research Assistant @ ECE* *May 2017 - Aug 2017*

## PROJECTS

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- **Optimization of Deep Learning Inference Engine on Autopilot Devices** *Sep. 2017 - Present*
    - Re-implemented tensorNet to accept custom models
    - Currently under active development
  - **C0 Compiler** *Sep. 2017 - Present*
    - Implemented using Swift with C-bridged lexer and yacc parser generators
    - Currently supports a straight-line and loop-only subset of C
  - **yNN: a Lightweight Neural Network Framework** *Sep. 2017 - Present*
    - Easy to build a fully-fledged neural network for quick model verification
    - Built from scratch and open-source after the end of 2017 Fall semester
  - **Automated Optimization of Linear Algebra Kernels** *May. 2017 - Aug. 2017*
    - Implemented code generator which generates optimized code whose performance is as good as expert-tuned kernels
    - Generalized the kernel to algebraic path problem
  - **Footprint One-shot Recognition based on Convolutional Neural Networks** *Apr. 2017 - May. 2017*
    - Implemented an AlexNet-like network to handle augmented images
    - Developed multiple augmentation methods to overcome limited training set
    - Achieved state-of-the-art accuracy in test set
  - **CUDA accelerated PCA** *Apr. 2017 - May. 2017*
    - Achieved 200x speedup compared to baseline
  - **Linux Shell** *Mar. 2017*
    - Supported multiple child processes and background/foreground switching
    - Eliminated race conditions between processes
  - **3D reconstructions of Light Field Images** *Jun. 2016 - Dec. 2016*
    - Implemented a software which takes image captured by light field camera into depth adjustable images
    - Calibrated driver parameters of Lytro light field camera

## SKILLS

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- **Machine Learning:** TensorFlow, Caffe, MATLAB
  - **High Performance Computing:** Intel AVX, CUDA, TensorRT, OpenMP
  - **Programming Languages:** C, C++, Python, Swift, Haskell, x86-64 asm