

# Kuo-Hao Zeng

Resume/ Curriculum Vitae

Email: [jacky55062003@gmail.com](mailto:jacky55062003@gmail.com)

Github: <https://github.com/jacky55062003>

Web: <https://kuohaozeng.github.io>

## EDUCATION

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<b>MS</b>	<b>NATIONAL TSING HUA UNIVERSITY (NTHU)</b>	Hsinchu, Taiwan
	Master - Department of Electrical Engineering	Sep, 2014 – Current
	GPA: 4.3/4.3	
	Rank: Top 1%	
<b>BS</b>	<b>NATIONAL SUN YAT-SEN UNIVERSITY (NSYSU)</b>	Kaohsiung, Taiwan
	Bachelor - Department of Mechanical and Electromechanical Engineering	Sep, 2010 – Jun, 2014
	GPA: 88.46/100, 3.62/4.0 (overall); 88.73/100, 3.7/4.0 (major); 93.29/100, 3.9/4.0 (last-60);	
	Rank: Top 12.5% (7 <sup>th</sup> /56)	

## PUBLICATION

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- [1] **Kuo-Hao Zeng**, Yen-Chen Lin, Ali Farhadi, Min Sun, “Learning from Viral Videos to Identify Semantic Highlight in Personal Videos”, *CVPR15’ Workshop*.
- [2] **Kuo-Hao Zeng**, Yen-Chen Lin, Ali Farhadi, Min Sun, “Semantic Highlight Detection in Viral Videos”, *CVGIP15’*.  
(Winner, CVGIP15’ Best Paper Award)
- [3] **Kuo-Hao Zeng**, Yen-Chen Lin, Ali Farhadi, Min Sun, “Semantic Highlight Retrieval”, *ICIP16’*.
- [4] **Kuo-Hao Zeng**, Tseng-Hung Chen, Juan Carlos Niebles, Min Sun, “Title Generation for User Generated Videos”, *ECCV16’*.
- [5] Min Sun, **Kuo-Hao Zeng**, Yen-Chen Lin, Ali Farhadi, “Semantic Highlight Retrieval and Term Prediction”, Submitted to *TIP*.

## HONERS AND AWARDS

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- **Student Travel Award for ICIP (2016)**
  - **Member of Phi Tau Phi Scholastic Honor Society of the Republic of China (2016)**
    - Top 3% Students per year in College of EECS at NTHU.
  - **Best Paper Award in 28<sup>th</sup> IPPP Conference on CVGIP, Taiwan (2015)**
    - Paper title: Semantic Highlight Detection in Viral Videos.
  - **NovaTek Scholarship (2015)** - 10 winners per year in College of EECS, in Taiwan.
  - **2<sup>nd</sup> prize, MediaTek summer intern final group project presentation. (2014)**
  - **Presidential Awards (amount to 5 semesters) (2010 - 2014)**
    - Awarded to top 5% of students in each department of National Sun Yat-Sen University.
  - **NSYSU Undergraduate Outstanding Project (2013)**

# RESEARCH EXPERIENCE

## ● Vision Science Lab

Advisor: Prof. Min Sun

Video Question Answering and Dialog System (2016 - current)

Large Scale Video Data Collection (2015 - current)

Deep Learning on Computer Vision – CNN, RNN (2015 - current)

Video Event Recognition, Summarization and Caption Generation (2014 - current)

## ● Bio-Medical Micro Electro Mechanical Systems Lab

Advisor: Prof. Chen-Wen Yen

The Correlation between Heart Rate Variability and Apnea-Hypopnea Index is BMI Dependent (2014)

The Relation between Vertical Ground Reaction Force and Heart Rate during Treadmill Running (2013 - 2014)

# CORE COURSE AND GRADES

(\*): Undergraduate course

## Signal Processing:

Digital Signal Processing

(99/100)

Stochastic Processes and Modeling

(93/100)

## Computer Vision & Parallel Computing:

Computer Vision for Visual Effects

(A+/A+)

Parallel Programming

(A+/A+)

## Machine Learning:

Introduction to Optimization (\*)

(96/100)

Introduction to Neural Networks

(99/100)

Machine Learning Theory

(A+/A+)

Advanced Machine Learning Theory

(A+/A+)

Neural Networks

(A+/A+)

# SELECTED TERM PROJECT

**Image Processing** GUI for Image processing and Image Compression implementation.

**Neural Network** Auto-encoder and Classification on MNIST, Chars74K and CIFAR-10 Dataset.

**Computer Vision for Visual Effects** Project Website: <https://sites.google.com/site/computervisionvisualeffectsg11/home>.

**LAB Project** CNN, RCNN, Fast RCNN, Faster-RCNN, LSTM Training & Fine-tuning, Sequence-to-Sequence.

# SKILL

## Programming Languages

C, C++, C#, Python, Perl

## Programming Library & Open Source

MPI, OpenMP, Pthread, Cuda, OpenCV, LIBSVM, Caffe, TensorFlow

## Simulation Software

MATLAB, HSPICE

# WORK & TEACHING EXPERIENCE

Teaching Assistant of Computer Vision (Graduate School)

Fall, 2015

Teaching Assistant of Signal and System

Spring, 2015

MediaTek Summer Intern

7/2014 – 9/2014

HIWIN Summer Intern

7/2013 – 8/2013

# INTEREST AND ACTIVITIES

● Computer Vision Research and Paper Publication on CVPR, ICCV, ECCV, NIPS.