

# SHIH-MING “Mingo” WANG

## PERSONAL DATA

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EMAIL: [swang150@ucsc.edu](mailto:swang150@ucsc.edu)  
HOMEPAGE: <http://ipod825.github.io/>

## EDUCATION

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University of California, Santa Cruz

2016-PRESENT | Pursuing a PhD in Computer Science

National Taiwan University (Best Ranked in Taiwan)

JUNE 2014 | M.S. in Electrical Engineering, majoring Computer Science (Gpa: 4.21/4.3)  
    ◇ Thesis title: Investigation on Optimal Mixing with Linkage Sets and Its Application  
    ◇ Thesis advisor: Prof. Tian-Li Yu  
JUNE 2012 | B.S. in Electrical Engineering (Gpa:81.74/100)

## PREVIOUS PROJECTS

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- **Keraflow**(Python): Open source project implementing a deep Learning library for Theano and Tensorflow, following Keras API.
- **Chinese OCR**(Matlab): Course project for the OCR contest in machine learning class (NTU).
- **ChenLianYen**(Javascript): Course project implementing a web-based RPG game.

## RESEARCH EXPERIENCE

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Academia Sinica (National academy of Taiwan)

- **Augmented NTUSD**: Built a Chinese sentiment dictionary containing polarity information of words for use of research on sentiment analysis. Designed experiments to test the applicability of the dictionary.
- **Chinese Sentiment Analysis**: Applied word embedding as feature to determine sentiment polarity of each Chinese word using a neural network model.

National Taiwan University

- **LTGA Improvement**: Analyzed on a theoretical basis how the linkage-tree genetic algorithm (LTGA) utilizes its linkage model and improved LTGA by applying a dynamic model throughout the optimizing process.
- **GA Benchmark Design**: Analyzed on a theoretical basis what problems are difficult for genetic algorithms (GA-hard) and designed a benchmark with controllable problem complexity for testing modern GAs.
- **Animated Photo**: Implemented a system that takes single face photo as input and generates animated photos. Technique involves: face recognition, face modeling, image morphing.

## WORK EXPERIENCE

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SEP. 2016	<b>Teaching Assistant</b> , CS Department, UCSC ◇ Course: Introduction to Programming in Python ◇ Gave extra lectures regarding assignments. Graded homework exams
AUG. 2015	<b>Research Assistant</b> , NLPLab, Academia Sinica
AUG. 2014	<b>Mandatory National Substitute Service</b> , Environmental Protection Bureau of Taichung City Government ◇ Wrote web applications
FEB. 2014	<b>Teaching Assistant</b> , CS Division, EE Department, NTU ◇ Courses: Probability and Statistics, Algorithm, Genetic Algorithm ◇ Prepared reviewing material and gave reviewing lectures. Gave extra lectures for challenged students. Graded homework & exams
FEB. 2012	<b>System Manager</b> , TEILAB, CS Division, EE Department, NTU ◇ Maintained web, nfe, nis server and laboratory cluster

## PUBLICATION & PRESENTATION

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**Wang, Shih-Ming**, Lun-Wei, Ku *ANTUSD: A Large Chinese Sentiment Dictionary*. LREC. 2016

**Shih-Ming Wang**, Yu-Fan Tung, and Tian-Li Yu, *Investigation on Efficiency of Optimal Mixing on Various Linkage Sets*. In Proceedings of the IEEE Congress on Evolutionary Computation (CEC), 2014.

◇ Gave oral presentation at International Convention Center, Beijing, China

**Shih-Ming Wang**, Jie-Wei Wu, Wei-Ming Chen, and Tian-Li Yu, *Design of Test Problems for Discrete Estimation of Distribution Algorithms*. In Proceedings of Conference on Genetic and Evolutionary Computation (GECCO), 2013.

## ACHIEVEMENT & AWARDS

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2014	Travel Grant of Domestic Graduate Attending International Symposiums, Ministry of Science and Technology, Taiwan
2013	Graduate Teaching Assistantship, CS Division, EE Department, NTU

## SELECTED EXTRACURRICULAR

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2012-2014	Member, Swimming Team of Medicine School, NTU
2010-2011	Deputy Director of Activities, Taichung Alumni Club
2010	Convener, Taichung Alumni Club Summer Camp, NTU
2006	Treasurer, Harmonica Club, TCFSH

## SKILLS

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**Programming:** C/C++, Java, Javascript, Python, MATLAB®

**Languages:** Chinese (native), English (fluent), Taiwanese (intermediate)