

## KUAN-YU CHEN

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### EDUCATION

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September 2016 – April 2018 University of Michigan, Ann Arbor, Michigan, United States  
Master of Science  
Electrical and Computer Engineering(Machine Learning Track)  
GPA: 3.4 / 4.0

September 2011 – June 2015 National Taiwan University (NTU), Taipei, Taiwan  
Bachelor of Science  
Engineering Science and Ocean Engineering (ESOE)  
Major GPA: 4.03/4.3, Overall GPA: 3.71/4.3

### RESEARCH EXPERIENCE

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September 2016 – Present GEMS: Graph Exploration and Mining at Scale Lab, UMich

- Topic: Hash-based Alignment for Multiple Graphs
- Design an algorithm that utilize locality sensitive hashing to find potential matching when given multiple graphs
- Explore through different attributes, hashing settings and datasets to align graphs both effectively and efficiently
- Improve our algorithm and combine with existing alignment algorithms to guarantee performance on larger graphs

September 2015 – February 2016 Mining Large-Scale Graph Data Course, UMich

- Topic: Anomaly Detection via Transfer Learning
- Processed large temporary YouTube Datasets, extracted various attributes and constructed graphs using Python
- Apply machine learning algorithms and learn labels for each node
- Find potential anomalies using mismatches labels and compare with baseline anomaly detection algorithm

### WORK EXPERIENCE

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September 2015 – August 2016 Teaching Assistant, NTU

- Taught and assisted in Engineering Mathematic, Linear Algebra, Signals and Systems, Fundamental Engineering Laboratory in a class of 50

July 2014 –	Intern at AIRTEK, New Taipei
September 2014	Research and Development Department <ul style="list-style-type: none"> <li>• Constructed a communication system for the controllers and test the stability of the system</li> <li>• Built user interfaces for the products with software provided by the company</li> </ul>

## **AWARDS AND ACHIEVEMENTS**

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Fall 2014	Presidential Award <ul style="list-style-type: none"> <li>• Awarded to students ranking top 5% in department</li> </ul>
January 2014	Bicycle Tour of Taiwan

## **EXTRACURRICULAR ACTIVITIES**

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July 2012 –	The ESOE Student Association
August 2014	<ul style="list-style-type: none"> <li>• Activities Coordinator of NTU ESOE Summer Camp, 2014</li> <li>• Creative Director of the NTU ESOE Orientation Camp, 2013</li> <li>• Team Leader in the NTU ESOE Summer Camp, 2012</li> </ul>
September 2011 – June 2013	NTU Pop Dance Club <ul style="list-style-type: none"> <li>• Public relations</li> </ul>
April 2015 – Present	Devoted to working out four times a week

## **SKILLS**

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Language	Fluent in Mandarin Intermediate in English
Technical Skills	Data Mining, Machine Learning (clustering, regression, clustering, anomaly detection, feature engineering), Probability, Database Management System, Operating System
Programming:	Familiar with Python (scikit-learn, numpy, scipy, pandas) and Oracle SQL. Experienced with C++, JAVA
Software	MATLAB, Hadoop (Mapreduce in Python), Microsoft Excel, LaTeX