# KUAN-YU (David) CHEN

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## EDUCATION

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|---|---|
| September 2016 – April 2018 | University of Michigan, Ann Arbor, Michigan, United States <br> Master of Science <br> Electrical and Computer Engineering(Machine Learning Track) <br> GPA: 3.45 / 4.0 |
| September 2011 – June 2015 | National Taiwan University (NTU), Taipei, Taiwan <br> Bachelor of Science <br> Engineering Science and Ocean Engineering (ESOE) <br> Major GPA: 4.03/4.3, Overall GPA: 3.71/4.3 |

## RESEARCH EXPERIENCE

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| September 2016 – April 2017 | GEMS: Graph Exploration and Mining at Scale Lab, UMich <br> • Topic: Hash-based Alignment for Multiple Graphs <br> • Design an algorithm that utilize locality sensitive hashing to find potential matching when given multiple graphs <br> • Explore through different attributes, hashing settings and datasets to align graphs both effectively and efficiently <br> • 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 <br> • Topic: Anomaly Detection via Transfer Learning <br> • Processed large temporary YouTube Datasets, extracted various attributes and constructed graphs using Python <br> • Apply machine learning algorithms and learn labels for each node <br> • Find potential anomalies using mismatches labels and compare with baseline anomaly detection algorithm |

## WORK EXPERIENCE

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| May 2017 – August 2017 | Software Engineer Internship, Expedia Inc., Chicago <br> Data Engineering Team <br> • Analyzed data stored on AWS with Hive queries on Qubole <br> • Wrote MapReduce code in Python with logic incorporating |

| | various input format to extract all Transaction information |
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| | • Do testing on different environments (Include running MapReduce job through Hadoop on AWS) |
| 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 |

## AWARDS AND ACHIEVEMENTS

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| Fall 2014 | Presidential Award |
| | • Awarded to students ranking top 5% in department |
| January 2014 | Bicycle Tour of Taiwan |

## EXTRACURRICULAR ACTIVITIES

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| July 2012 – August 2014 | The ESOE Student Association |
| | • Activities Coordinator of NTU ESOE Summer Camp, 2014 |
| | • Creative Director of the NTU ESOE Orientation Camp, 2013 |
| September 2011 – June 2013 | NTU Pop Dance Club |
| | • Public relations |
| 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, regex) and Relational Database (Oracle SQL, Hive, Teradata). Experienced with C++, JAVA |
| Software | Hadoop (Mapreduce in Python), Qubole, MATLAB, Microsoft Excel, LaTex |