# **KUAN-CHUN DAVID CHENG**

#### **EDUCATION**

University of Michigan School of Information, Ann Arbor MI

April 2016

- Master of Science in Information, GPA: 3.75
- Specialization: Human Computer Interaction, Information Analysis and Retrieval
- Second place in 2014 Barracuda UM Programming Contest

## National Cheng Kung University, Taiwan

August 2013

Master of Science in Computer Science, GPA: 4.0

- Research focus: Machine Learning, Speech Recognition.
- · Graduated with Second Best Thesis Award

National Taiwan University, Taiwan Bachelor of Science In Mathematics June 2008

# **PROGRAMMING**

C/C++ · Java · Objective-C Python· HTML · CSS Javascript · PHP · SQL

■ kccheng@umich.edu

Web App Development

Mobile App Development

Information Visualization

★ +1 734 680 4093★ www.kccheng.com

**Database Design** 

Interaction Design

User Experience Design

Data Analytics
Machine Learning

**EXPERTISE** 

# PROJECT EXPERIENCE

NTVB Media, Troy, MI

1/2015 - Current

Mobile App Developer, Multidisciplinary Design Program

 Design and developed Android App with TV show recommendation and Quiz game features for NTVB Media

## PROFESSIONAL EXPERIENCE

The University of Michigan, Ann Arbor, MI

2/2014 - Current

Web Developer, College of Architecture and Urban Planning

 Developed a website using Google Direction API that can help urban planners identify the delayed intersections of a route and the total delay time

## ASUS Computer Inc. Taiwan

4/2014-7/2014

Software Engineer, Advanced Technology Division

- Co-built a spoken language understanding system which understands user dialog, included word segmentation, semantic tagging, intention extraction, dictation and clarification
- Designed and developed efficient correction algorithms for word errors from Google Voice result and Asus speech recognizer result on Android platform
- Coordinated and cooperated the key functions with speech and NLP team

## National Cheng Kung University, Taiwan

2/2011-7/2013

Graduate Research Associate, Speech Processing Lab

- Analyzed speech data set; designed and developed algorithm to recognize the emotional state from speech sentences
- Improved the emotion recognition accuracy from 68% to 83% and professional in machine learning
- Designed and developed a bilingual speech recognition system using HTK toolkit, which reached a highest performance among the state-of-the-art approaches
- Edited the technical manual and provided technical training for new lab members

# UX

- · Affinity Diagramming
- Usability Testing
- Heuristic Evaluation
- Storyboarding
- · Rapid Prototyping
- Wireframing

#### **SOFTWARE**

## **Operating System**

Mac OS · Linux · Windows

#### **Development**

Xcode · Android Studio · Vim · Ecllipse · Git Visual Studio

## **Statistical Package**

Matlab · R

## SELECTED COURSES

- Data Manipulation
- Data Analysis
- Database Design
- Information Visualization
- Machine Learning
- Information Retrieval
- Data Mining
- Data Structure/Algorithm
- Interaction Design
- Contextual Inquiry
- Usability Evaluation