# CHUNG YI KAO

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## SUMMARY
A technophile with the passion of using computer science knowledge to improve the quality of work and life.

## SKILL
- iOS and Android app development: Java, Swift, Objective-C
- Backend development: Node.js, JavaScript, SQL, MongoDB
- Keras machine learning framework: Python

## EXPERIENCE

**Mandatory Service**                                                           Sept. 2016 - July 2017
**Emergency Services Command Center Engineer**                                        Yulin, Taiwan
- Implemented the voice-typing system integrated into emergency command system.(100s to 20s)
- Implemented a human resource assistant ERP system and login App.(3 days to 1 day)
- Implemented a hacking CAPTCHA program for login.

**Mstar Semiconductor**                                                          Jan. 2016 - Sept. 2016
**Senior Software Engineer**                                                        Hsinchu, Taiwan
- Developed Android system stack for smart TV (Binder, service)
- Implemented electronic program guide application.
- Implemented an automatic tool for multi-language translation
  (Improved developing efficiency: 5hs to 1s)
- Implemented logger.(Increased debugging efficiency from 10mins to 5s)
- UML code injection.(Runtime sequence diagram for debugging)

**Industrial Technology Research Institute**                                      July 2013 - Sept. 2015
**iOS Development Engineer (Intern)**                                               Hsinchu, Taiwan
Smart Insulating Container with Anti-Theft Features by M2M Tracking in Proc. 2014 IEEE (iThings 2014)

- Implemented iOS monitor application, logging system, backend system for a cold-chain logistics system.
- Recognition algorithm for anti-theft.

**KerjaDulu**                                                                    Nov. 2014 - July 2015
**Android Development Engineer(part-time)**                                          Taipei, Taiwan
- KerjaDulu Human Resource App: Project Starter, OOP Design, UI effect, SQLite, RESTful API

**Campus Library**                                                               Nov. 2010 - July 2013
**MIS engineer of library services (part-time)**                                    Chaiyi, Taiwan
- Implemented Book Finder Android App to locate books
- Implemented assistant tools of library services
- Maintained Library Services and System server

## HONORS AND AWARDS
**Qualcomm award** in MobileHeros, *Book Finder*                                               2012
**Excellent work** in ICT Innovative Services, *Touch Projector*                               2012

## EDUCATION
*Master of Computer Science*, National Tsing Hua University, Taiwan.                     Sept. 2015
Thesis: EcoSim: A Smartphone-Based Sensor-Node Simulator with Native Sensor and Protocol-Stack Emulation

## PROJECT
- Smart Leave System (Alternative Military Service)
- EcoSim: A Smartphone-Based Sensor-Node Simulator with Native Sensor and Protocol-Stack Emulation
- An In-Situ Motion Measurement System for Underwater Sediments Tracking in Proc. 2014 IEEE International
  Conference on Cyber, Physical and Social Computing (CPSCom 2014)
- Touch projector
- Book Finder (Indoor location service of library)
- Gesture recognition with IoT platform based on triaxial acceleration
- Using Machine Learning to hack CAPTCHA
- Voice Recognition and Correction (ED algorithm)
- Make Desktop touchable with the cheap webcam
- Self-propelled Car