Sandra Hung Chen

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OBJECTIVE

Seeking for a software engineer internship of Facebook in summer 2016.

EDUCATION

University of Michigan, Ann Arbor, MI, U.S.A.   *04/2017*
- Master of Science in Electrical Engineering: System   Major *GPA: 3.70/4.0*
- Related Courses**:** Introduction to Operating Systems(in progress), Machine Learning, Database Management Systems, Probability and Random Processes, Financial Engineering I and II(in progress)

National Taiwan University (NTU), Taipei, Taiwan   *09/2011 - 06/2015*
- Bachelor of Science in Electrical Engineering   *GPA: 3.87/4.0*
- Related Courses: Algorithms, Artificial Intelligence, Data Structure and Programming, Robot Sensing and Control

TECHNICAL SKILLS

Programming Language: C/C++, SQL, MATLAB, Python, C#, Verilog

WORK EXPERIENCE

Cofounder and Chief Marketing Officer, ScoreMaster, Taiwan   *11/2013 - 08/2015*
- Established the startup and developed an IOS/Android app to provide real time support to high school students across core academic subjects. Promoted the admission to NTU incubator and AppWorks accelerator.
- Developed marketing and pricing strategies attracting more than 5,000 students to ask questions through the ScoreMaster app at the cost of $1 per question. Recruited over 180 professional educators to answer.

Product Management & Industrial Design Intern, IPEVO, Taiwan   *07/2014 - 08/2014*
- Researched and analyzed competitors' design and technology on document cameras for the new product line.
- Designed additional functions and low-cost implementation for the IPEVO interactive whiteboard.

PROJECT EXPERIENCES

Identifying Suspicious URLs: Large-Scale Online Learning (Python)   *10/2015 - 12/2015*
- Implemented four machine learning methods including Perceptron, Logistic Regression with Stochastic Gradient Descent, Passive-Aggressive (PA) Algorithm and Confidence-Weighted (CW) Algorithm.

Logging and Recovery (C++)   *10/2015 - 11/2015*
- Implemented a single-threaded version of ARIES(write-ahead logging and with a recovery algorithm).

Querying the Fakebook Database with JDBC (SQL)   *09/2015 - 10/2015*
- Wrote SQL queries and embed SQL queries into Java source code (using JDBC) to implement "Fakebook Oracle," a standalone program that answers several queries about the Fakebook database.

Fall Detection System for home safety (C#)   *02/2015 - 06/2015*
- Implemented a real time fall detection and alarm system. Reduced the potential medical cost for senior home safety.
- Used Arduino chip, C# based HMMs, and 3D-printed models to produce a low-cost($10) fall detection device.

Data Structure and Programming Implementation (C++)   *09/2013 - 06/2014*
- Implemented a Functionally Reduced And-Inverter Graph (FRAIG) system in C++.

RESEARCH AND LABORATORY EXPERIENCE

Speech Recognition (Advisor: Prof. Lin-Shan Lee, Speech Processing Lab., NTU)   *09/2013 - 06/2014*
- Implemented multilayer regression analysis on speakers' independent structural features for pronunciation proficiency estimation. Used foreign students' recordings and phonetic instructors' reviews as the corpus data.

Robotics for Biomedical Engineering (Advisor: Prof. Ren C. Luo, NTU)   *09/2014 - 06/2015*
- Allowed surgeons to operate the endoscopic camera with head movement which eliminated the need for a second doctor during the mini-invasive surgery. Reduced the medical cost.
- Implemented a memory function allowing doctors to save positions of the endoscopic camera which can be arrived immediately in a surgery. Shorten the duration of a surgery.

Human Intentional Actions Recognition (Advisor: Prof. Li-Chen Fu, NTU)   *09/2014 - 06/2015*
- Developed an action recognition algorithm that enables robots to recognize human intentions: Approach or Apart.
- Implemented in C#. Used supervised HMM and experimented on Ariel Robot and testers from NTU.

LEADERSHIP AND SERVICES

Marketing Department, Rainbow Hope(R.H.) Program   *09/2013 - 06/2014*
- R.H. : Set up by NTU students founding for over $30,000 on houses reconstruction of victims after Typhoon Herb.