Lab #342, CSIE building
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Wei-Chen Chen

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EDUCATION

Bachelor of Science in Computer Science and Information Engineering
National Taiwan University, Taipei, Taiwan *Sep. 2007 - Jun. 2011*

- **Major GPA:** 4.0/4.0 (90.61/100)
- **Cumulative GPA:** 3.85/4.0 (86.88/100)
- **Relevant Coursework:** Computer Networks & Lab, Computer System Lab, Design Strategies for Computer Algorithms, Database Systems, Machine Learning, Numerical Methods, Parallel Programming, Human-Computer Interaction with Mobile Phones and Services, Software Design Pattern, Visual Identity Design

HONORS AND AWARDS

Presidential Award *Spring 2009*

- Final GPA in the top 5% in Dept. of Computer Science and Information Engineering

Municipal Outstanding Student Award (Valedictorian) *Jun. 2007*

PUBLICATIONS

[1] Ching-Hu Lu, Chao-Lin Wu, Mao-Yuan Weng, **Wei-Chen Chen**, and Li-Chen Fu, "Context-Aware Energy Saving System with Multiple Comfort-Constrained Optimization in M2M-based Home Environment", *IEEE Transactions on Human-Machine Systems* (Accepted)

RESEARCH EXPERIENCE

Research Assistant *Aug. 2012 – Present*
Smart Service and Applications Group, Intel-NTU Connected Context Computing Center
Advisor: Prof. Li-Chen Fu

- **M2M-based Context-aware Home Energy Saving System:**
  - Contributed to the data analysis and system implementation in related publications' experiments
  - Built up the real-time system in a home environment to evaluate the proposed energy saving system, which was originally a simulation system
  - Designed the interactive web interface for information visualization and user feedback collection
  - Conducted a study to evaluate user satisfaction and energy consumption
  - Integrated heterogeneous system components such as appliance controlling, inference engine, and wireless sensor network
  - Managed the servers in lab as network administrator

Undergraduate Research *Jul. 2010 – Aug. 2011*
Smart Home Group, Intelligent Robot and Automation Lab, National Taiwan University
Advisor: Prof. Li Chen Fu

- **Individual-PMV-Based HVAC System:**
  - Implemented a system to control Heating, Ventilation, and Air Conditioning (HVAC) system based on the Predicted Mean Vote (PMV), a well-known indicator of human thermal comfort

- Designed a method to perform dynamic adaptation on PMV index so that the adapted index (Individual-PMV), could stand for a specific user more closely
- Developed programs on TinyOS platform and deployed wireless ambient sensors in real environment to conduct experiments
- Implemented an interactive Java desktop application interface showing dynamic information to perform model adaptation

- **Illumination-Comfort Control System**
  - Implemented a lighting control system, which focuses on providing the most proper illumination according to the environmental context including user's activity and natural lighting availability
  - Integrated with an activity recognition engine developed by our group to infer the ideal illumination configuration so that users can maintain high productivity in the environment

PROFESSIONAL EXPERIENCE

Corporal of Military Police *Aug. 2011 – Jul. 2012*
Office of the President of the Republic of China
- Led troops to safeguard the front court of the building and to prevent illegal demonstrations

Lecture Recorder *Mar. 2010 – May. 2010*
OpenFoundry (Open Source Software Foundry)
- Recorded the content of lectures funded by OpenFoundry on video

Instructor of Math *Jul. 2007 – Sep. 2008*
High School Math Learning Center in Taipei
- Designed teaching material and tests, taught math to more than 300 high school students

ACTIVITIES

Activity Planner and Social Event Coordinator *Sep. 2008 – Jun. 2010*
Cook and Taste Club, National Taiwan University
- Organized cooking lessons, restaurant visits, and social events
- Invited professional chefs as guest teachers

LANGUAGES AND SKILLS

Computers and Programming

C, C++, Java, Python, Ruby, Matlab, SQL, HTML, CSS, PHP, XML, JavaScript, Linux, Latex, Hadoop, Hbase

Languages

English (fluent), Taiwanese (native), Mandarin Chinese (native)
TOEFL: R27 / L27 / S18 / W27 / Total: 99, *2013*
GRE: **Verbal 750** (**99%**) / **Quantitative 800** (**93%**), *2011*