

Pei-Yu (Peggy) Chi

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(Latest update: 11/18/2009)

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA, USA

M.S. in Media Arts and Sciences, GPA 5.0/5.0 (*overall*), from MIT Media Lab

09/2008–present

Research Focus: Commonsense Computing and Human-Computer Interaction

Courses: Common Sense for Interactive Applications, Tangible Interfaces, The Society of Mind, and Designing the Connected Sustainable Home

NATIONAL TAIWAN UNIVERSITY

Taipei, Taiwan

M.S. in Computer Science, GPA 4.0/4.0 (*overall*)

09/2006–06/2008

from Graduate Institute of Networking and Multimedia

Research Focus: Ubiquitous Computing and Human-Computer Interaction

Courses: AI, Advanced AI, Multimedia Analysis and Indexing,

Digital Speech Processing, Wireless Multimedia System, Technical Writing, and Net Art

NATIONAL TAIWAN UNIVERSITY

Taipei, Taiwan

B.B.A. in Information Management, GPA 3.6/4.0 (*overall*); 3.8/4.0 (*last 60*)

09/2002–06/2006

STANFORD UNIVERSITY

Palo Alto, CA, USA

“U.S. Language and Culture” Program

07/2004–08/2004

NEW COLLEGE NOTTINGHAM

Nottingham, UK

“English as a Foreign Language” Program

07/1999–08/1999

PUBLICATION

Conference papers:

- [1] Pei-yu Chi, Xiao Xiao, Keywon Chung, and Carnaven Chiu, “Burn Your Memory Away: One-time Use Video Capture and Storage Device to Encourage Memory Appreciation,” in Extended Abstract of *ACM CHI 2009* (alt.chi session), Boston, MA, USA, April, 2009.
- [2] Keywon Chung, Carnaven Chiu, Xiao Xiao, and Pei-yu Chi, “Stress Outsourced: A Haptic Social Network via Crowdsourcing,” in Extended Abstract of *ACM CHI 2009* (alt.chi session), Boston, MA, USA, April, 2009.
- [3] Pei-yu Chi, Jen-hao Chen, Hao-hua Chu, and Jin-ling Lo, “Enabling calorie-aware cooking in a smart kitchen,” in Proceeding of *Persuasive 2008*, Oulu, Finland, June, 2008.
- [4] Yu-chen Chang, Jin-ling Lo, Chao-ju Huang, Nan-yi Hsu, Hao-hua Chu, Hsin-yen Wang, Pei-yu Chi, and Ya-lin Hsieh, “Playful toothbrush: Ubicomp technology for teaching tooth brushing to kindergarten children,” in Proceeding of *ACM CHI 2008*, Florence, Italy, April, 2008.
- [5] Pei-yu Chi, Jen-hao Chen, Shih-yen Liu, and Hao-hua Chu, “Designing smart living objects - enhancing vs. distracting traditional human-object interaction,” in Proceeding of *HCI International 2007*, Beijing, China, July, 2007. (*an invited paper*)

Magazine/journal papers:

- [6] Jin-ling Lo, Pei-yu Chi, Hao-hua Chu, and Seng-cho T. Chou, “Pervasive computing in play-based occupational therapy for young children,” in *IEEE Pervasive Computing Magazine*, vol. 8, issue 3, 2009.
- [7] Jen-hao Chen, Pei-yu Chi, Hao-hua Chu, and Cheryl Chia-Hui Chen, “Pervasive computing in a smart kitchen for nutrition-aware cooking,” to appear at *IEEE Pervasive Computing Magazine*.

Poster papers:

- [8] Pei-yu Chi, Jen-hao Chen, Hao-hua Chu, and Bing-yu Chen, “Enabling nutrition-aware cooking in a smart kitchen,” in Extended Abstract of *ACM CHI 2007* (work-in-progress session), San Jose, CA, USA, April, 2007. (*People’s Choice Award*)

- [9] Jen-hao Chen, Keng-hao Chang, Pei-yu Chi, and Hao-hua Chu, “A smart kitchen to promote healthy cooking,” in Adjunct Proceedings of *UbiComp 2006*, Orange County, CA, USA, September, 2006.

Thesis:

- [10] Pei-yu Chi, “Enabling calorie-aware cooking in a smart kitchen,” M.S. Thesis, Graduate Institute of Networking and Multimedia, National Taiwan University, Taiwan, July, 2008.

Book chapter:

- [11] Pei-yu Chi, “YEF的另類學習—「創業課程研習會」”, in 世界很平我不平：270天的創新創業青春探險，時代基金會著，藍鯨出版社，Taipei, Taiwan, Aug, 2006, pp.104-107.

HONOR AND AWARDS

Phi Tau Phi Award, Member of the Phi Tau Phi Scholastic Award Society, Taiwan, 05/2008

1st Place of GPA, *National Taiwan University*, Taiwan (GPA in the top of students in Graduate Institute of Networking and Multimedia, Spring 2007 and Fall 2007), 10/2007, 03/2008

3rd Prize of Paper Award, *The Cooperative Workshop of CyberLink and CML on Communications and Multimedia*, Taiwan, 03/2008

Garmin Scholarship, Taiwan, 12/2007

People’s Choice Award, *ACM CHI 2007 Work-in-progress paper*, San Jose, CA, 05/2007

2nd Place, *ImagineCup 2007 Software Design Competition*, hosted by Microsoft Taiwan, 05/2007

Excellent Work Award, *The 1st Acer Long-term Smile Contest*, Taiwan, 10/2006

Presidential Award, *National Taiwan University*, Taiwan (GPA in the top 5% of the students in Dept. of Information Management, Fall 2004), 03/2005

RESEARCH EXPERIENCE

Graduate Student/Research Assistant, *Software Agents Group, Media Lab, MIT* 09/2008–present

- Research on human-computer interaction and commonsense reasoning
 - **Raconteur: From Intent to Stories**: When editing a story from a large collection of media, it is not always easy to understand how particular scenes fit into the intent for the overall story. Raconteur is a story editing system that helps a storyteller assemble coherent stories from media elements with a viewer, and focuses on finding *story analogies* – different elements illustrating the same overall “point”.
 - **Goal-oriented Interfaces for Consumer Electronics**: Consumer electronics devices are becoming more complicated, intimidating users. Using common-sense reasoning, we built a system, Roadie, with knowledge about the user's intentions; this knowledge will help the device to display relevant information to reach the user's goal. The interface is constructed on real CE devices, which communicate over the UPnP protocols.

Graduate Student/Research Assistant, *UbiComp Lab, National Taiwan University* 12/2005–08/2008

- Research on ubiquitous computing and human-computer interaction
 - **Calorie-aware kitchen**: developed a smart kitchen with UbiComp technology to improve home cooking by providing calorie awareness of food ingredients used during the cooking process, which can be an effective means in helping family cooks maintain the healthy level of calories in their prepared meals.
 - ◆ Results were published in [3][8][9][7] (Persuasive, CHI, UbiComp, and Pervasive Magazine) and the M.S. thesis [10].
 - **UbiComp technologies for play-based occupational therapy**: demonstrated two playful activity designs targeting on slow eating and tooth brushing behaviors that UbiComp can assist parents and therapists by embedding digital technology into activities that leverage children’s desire to play and induce their change.
 - ◆ Results were published in [6][4] (Pervasive Magazine and CHI).
 - **Designing smart everyday objects**: surveyed and classified smart objects based on the relation between the object’s digital and traditional functions and object-human interaction, then mapped out into a design space.
 - ◆ Findings were published in [5] (HCI International).
 - **Intelligent system of social network agents**: developed an intelligent system of social network agents for managing and analyzing personal social contacts over the web.
 - ◆ The ImagineCup 2007 winner.

Conferences/workshops presented (attended):

- International conferences: [presented] *ACM CHI 2009* (Boston, MA), *Persuasive2008* (Oulu, Finland), *ACM CHI 2007* (San Jose, CA), *HCI International 2007* (Beijing, China), and *UbiComp 2006* (Orange County, CA); [attended] *Pervasive 2006* (Dublin, Ireland).
- Workshops: [presented] The Cooperative Workshop of CyberLink and CML on Communications and Multimedia 2007 & 2008 (Taipei, Taiwan), Technology Day of Univ. of Tokyo 2007 (Taipei, Taiwan), and Nightmarket Workshop 2006 & 2008 (Taiwan); [attended] Living Heritage of AI Workshop at MIT, June 2009 (Cambridge, MA).

WORK EXPERIENCE

Reviewer , <i>ACM CHI 2010, DAC 2009 (Digital Art and Culture), ACM UbiComp 2009, ACM CHI 2009 alt.chi session, IEEE Computer Magazine 2008</i>	2008–present
Teaching Assistant , <i>National Taiwan University</i> “Embedded Middleware” course taught by Prof. Hao-hua Chu	02/2007–06/2007
Teaching Assistant and Project Manager , “ <i>Nightmarket 2006</i> ”: <i>Workshop on Interaction, Design, Augmented Reality, and Telecommunication</i> TA for a 15-people discussion group “Stories in Nightmarket” Organized a workshop of 80 participants with 6 students from MIT Media Lab	06/2006
Computer Cluster Assistant , <i>College of Management, National Taiwan University</i> Increased user satisfaction level by 20%	09/2004–07/2005
Project Assistant , <i>Mercuries Data Systems Ltd.</i> Involved in the project with 5 people, cooperated with National Police Agency, Taiwan	05/2002–08/2002

ACTIVITIES

Committee Member , <i>MIT ROCSA Connect (Republic of China Student Association)</i> <ul style="list-style-type: none">• Hosted self-organizing events with 7 committee members	04/2009–present
President of Taiwan Chapter , <i>ASES (Asia-Pacific Student Entrepreneurship Society)</i> <ul style="list-style-type: none">• Managed an organization of 10 executive team members and more than 30 members, with 15 self-organizing events• Delegate of the 2005 ASES Stanford Summit, 2005 ASES Singapore summit• Led and organized the “MIT Sloan and NTU Roundtable Conference” attended by 25 MIT Sloan and 40 National Taiwan University students	06/2005–06/2006
(Others)	
<ul style="list-style-type: none">• The finalist of “Young Entrepreneurs of the Future” program (only 13 out of 200 students were selected); awarded a 2 weeks trip to visit MIT Media Lab, CSAIL, Stanford, and UC Berkeley, 10/2006• Vice President of NTU Student Association of Dept. of Information Management, 09/2004-07/2005• The concertmaster of string orchestra, Taipei ZhongShan Girls High School, 06/2000-10/2000• Member of orchestra, Taipei Ren-Ai Elementary School, 09/1994 – 06/1996	

SKILLS

- Programming languages: C#, Python, LISP, Java, JavaScript, C++, C, ActionScript, HTML, SQL, and UNIX shell scripting
- Tools: Microsoft Visual Studio, Matlab
- Languages: English (fluent), Mandarin Chinese (native), Taiwanese (native), Japanese (basic)
- GRE score: Verbal 580 (81%) / Quantitative 780 (90%), 09/2007;
Quantitative 800 (94%) / Analytical Writing 5.0 (73%), 06/2006
- TOEFL iBT score: 105, 11/2007

REFERENCES

- Prof. Henry Lieberman (advisor at MIT Media Lab), lieber@media.mit.edu, +1-617-253-0315
- Prof. Hao-hua Chu (thesis advisor at National Taiwan University), haochu@ntu.edu.tw, +886-2-2362-5336 #518