## LI, Deging

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# **EDUCATION**

**Dartmouth College**, Hanover, NH, U.S.A Doctor of Philosophy in Engineering Science 2007–2013(expected)

- Dissertation: Deception detection by modelling human reasoning
- Related coursework includes: Numerical Methods in Computing, Algorithms and Data Structures, Optimization Methods for Engineering Applications, Programming Languages, Statistical Methods in Engineering, Decision Making under Risk and Uncertainty, Modern Information Technologies, Machine Learning and Data Analysis.

Hong Kong Polytechnic University,Bachelor of Science (Hons) in Electronic and2003 – 2007HK, ChinaInformation Engineering (First honor)

- Received full scholarship for undergraduate study
- GPA: 3.71/4.0, WGPA: 3.81/4.0 (Rank 1 in program)
- Related coursework includes: Computer graphics, Data structure and algorithms, Information retrieval, Software engineering, Game project, Object oriented programing languages, Image and audio processing, Product design.

# Jönköping University, Sweden

Exchange Study

Aug. – Dec. 2004

Received scholarship for exchange study

### ACADEMIC ENGINEERING PROJECT EXPERIENCE

**Deception Detection**, Dissertation, Dartmouth College, Hanover, NH

2007 – present

- Proposed and simulated the cognitive process of deception
- Designed and developed an innovative detection model that can discriminate misinformation from deception
- Improved the performance and the robustness of deception detection compared with conventional methods

#### **User Modelling**, Dartmouth College, Hanover, NH

2007 – present

- Researched and developed user models that simulate human inference process
- Provided prediction and explanation on human behavior
- Involved in **ten funded projects** and applied user models to the analyses of large scale incidents such as medical emergencies and military events

## Automatic Tweeting Robot (independent project), Hanover, NH

2012 – present

- Developed a robot that can learn language from human tweets, form preference on concepts and generate meaningful tweets automatically
- Implemented a knowledge representation system from the inspiration of human language learning process

Magic Paint Face, Honor Project, Hong Kong Polytechnic University, HK, China

2006 - 2007

- Researched, designed and evaluated image estimation engines using neural network and support vector machine
- Implemented a web-based facial aging simulation system

#### INDUSTRIAL EXPERIENCE

Software Engineer, Mobile Gamer Limited, HK, China

July 2005 – 2006

- Involved in the entire process of software engineering including the design, the development and the deployment of mobile games
- Developed over ten online and offline mobile games including the best sellers of the company
- Implemented game AIs, libraries and engines to facilitate the development of future games

## **EXPERTISE**

Language: English (Fluent), Mandarin (Native), Cantonese (Skilled) and Shanghainese (Native)

Programing languages: Java, J2ME, C++, C#, Matlab, SQL, ASP, Java Script, Java Servlet, HTML, XML, SMIL, Lingo, Flash

Technical Skills: Knowledge engineering, Probabilistic reasoning, Machine learning, Natural language processing, Database, Algorithms

# **INTERESTS & ACTIVITIES**

Playing video games (all platforms), Watching animations, Drawing, Dancing, Traveling

## **AWARDS & SCHOLARSHIPS**

Best Paper Award, International Defense and Homeland Security Simulation Workshop, Rome, Italy	2011
IEEE (HK Section) Prize	2006 - 2007
UGC Scholarship for Outstanding Mainland Students	2006 - 2007
IT CourseWare Competition 2005 held by City University	Sep. 2005
• Enrolment in Final Round	
UGC Scholarship for Outstanding Mainland Students	2004 - 2005
The Best GPA Award	2004 - 2005
Awarded by Department of Electronic & Information Engineering	
The Best Semester GPA Award	2004 - 2005
Awarded by Department of Electronic & Information Engineering	
EIE Project Competition 2004 - Line Tracking Model Car	May 2004
Awarded second place in the final round	-
UGC Scholarship for Outstanding Mainland Students	2003 - 2004
Drs R C and E Y Lee Charitable Foundation Scholarship for Undergraduate Students from the	2002 - 2003
Mainland	

#### COMMUNITY SERVICES & SELECTED EXTRA-CURRICULA ACTIVITIES

Three-year assistant sponsors for WISP (woman in science project)

2010 - 2012

Mentored four Dartmouth undergraduate students on two research projects

UBS Young Talent Development Program

Oct. 2006

Student member of IEEE IEEE Student Branch, officer of Welfare

2004 – present Feb. – Aug. 2004

# SELECTED PUBLICATIONS

- 1. **Deqing Li** and Eugene Santos, Jr., "Argument Formation in the Reasoning Process: Toward a Generic Model of Deception Detection," in Proceedings of the EACL 2012 Workshop on Computational Approaches to Deception Detection, pp. 63-71, Avignon, France, April 23 27 2012.
- 2. Eugene Santos, Jr., Joseph Rosen, Keumjoo Kim, **Deqing Li**, Fei Yu, Yufan Guo, Elizabeth Jacobs, Sam Shih, Jean Liu, and Lindsay Katona, "Reasoning About Intentions in Complex Organizational Behavior," in Theories of Team Cognition: Cross- Disciplinary Perspectives (Eds. E. Salas, S. Fiore, and M. Letsky), pp. 51-86, Routledge: Taylor & Francis Group, 2012.
- 3. Eugene Santos, Jr., Keumjoo Kim, Fei Yu, **Deqing Li**, Phoebe Arbogast, Elizabeth A. Jacob, Joseph Rosen, "Modeling and Simulating Dynamic Healthcare Practices," in Proceeding of the International Defense and Homeland Security Simulation Workshop (DHSS 2011), Rome, Italy, 2011. [Best Paper Award]
- 4. **Deqing Li**, Eugene Santos Jr., "Deception detection in human reasoning". SMC 2011, pp. 165-172.
- 5. Eunice, E. Santos, Eugene Santos, Jr., John T. Wilkinson, John Korah, Keumjoo Kim, **Deqing Li,** and Fei Yu, "Modeling Complex Social Scenarios using Culturally Infused Social Networks," in Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics, pp. 3009-3016, Anchorage, AK, 2011.
- 6. Eugene Santos, Jr. and **Deqing Li**, "Deception Detection in Multi-Agent Systems," in IEEE Transactions on Systems, Man, and Cybernetics: Part A 40(2), pp. 224-235, 2010.
- 7. Eugene Santos, Jr., **Deqing Li,** and John T. Wilkinson, "A Framework for Reasoning Under Uncertainty with Temporal Constraints," in Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics, pp. 448-454, San Antonio, TX,2009.
- 8. Nicholas J. Pioch, James Melhuish, Andy Seidel, Eugene Santos, Jr., and **Deqing Li**, "Adversarial Intent modeling Using Embedded Simulation and Temporal Bayesian Knowledge Bases," (refereed abstract), in Proceedings of the SPIE Defense & Security Symposium, Vol. 7348, pp. 1–12, Orlando, FL, 2009.
- 9. Eugene Santos, Jr., Eunice E. Santos, Hien Nguyen, Long Pan, John Korah, Huadong Xia, Fei Yu, and **Deqing Li**, "Analyst-Ready Large Scale Real Time Information Retrieval Tool for E-Governance," E-Government Diffusion, Policy and Impact: Advanced Issues and Practices (Ed. M. Khosrow-Pour), pp. 268-294, IGI Global, 2008.