

# Yun Gyung Cheong

Doctoral Student  
 Department of Computer Science  
 North Carolina State University  
 Raleigh, NC 27695  
 919.247.2058  
 aimecca@gmail.com  
<http://www4.ncsu.edu/~ycheong/>

## RESEARCH INTERESTS

---

Narrative Generation, Interactive Storytelling, Discourse Generation, Natural Language Processing, Intelligent User Interface, E-Learning, Planning, Artificial Intelligence

## EDUCATION

---

Doctor of Philosophy in Computer Science, North Carolina State University, Raleigh, North Carolina, USA, expected in the summer of 2006

Dissertation Title: *A Computational Model of Narrative Generation for Suspense*

Advisor: R. Michael Young, Ph.D., Computer Science at North Carolina State University.

Master of Science in Information Engineering, Sungkyunkwan University, Seoul, South Korea, 1998

Thesis Title: *A Study on Tracking and Predicting the Face Trajectories Using a Neural Network*

Advisor: Moon-Hyun Kim, Ph.D., Computer Engineering at Sungkyunkwan University.

Bachelor of Science in Information Engineering, Sungkyunkwan University, Seoul, South Korea, 1996

## PERTINENT CLASSES TAKEN

---

Computational Models of Interactive Narrative, Special Topic on Discourse, Human Computer Interaction, Intelligent Media Systems, Introduction to Linguistics, Computational Applied Logic, Narrative Analysis, Neural Network and Fuzzy, Pattern Recognitions, Artificial Intelligence, Compiler Construction, Algorithm, E-Commerce Technology, Software Engineering Applications, Multimedia Communications

## PUBLICATIONS

---

### Papers in Conferences and Workshops:

A Computational Model of Narrative Generation for Suspense by Cheong, Yun-Gyung, and Young, R. Michael, to appear in the *AAAI 2006 Computational Aesthetic Workshop*, Boston, MA, USA, July 16, 2006.

A Framework for Summarizing Game Experiences as Narratives by Cheong, Yun-Gyung and Young, R. Michael, to appear in the *Second Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2006)*, Marina del Rey, CA, USA, June 20-23, 2006.

A Computational Model of Narrative Generation for Suspense by Cheong, Yun-Gyung, to appear in the *AAAI Doctoral Consortium*, Boston, MA, USA, July 16-17, 2006.

A Computational Model of Focalization in Narrative Planning by Cheong, Yun-Gyung, and Young, R. Michael, to appear in the *International and Interdisciplinary Symposium on Point of View, Perspective, Focalization: Modeling Mediacy*, University of Hamburg, Hamburg, Germany, October 13-15, 2006.

Operation & Maintenance System for Replicated HLR in Mobile Communications. Cheong Yun-Gyung, Sung-Ah Kim, Moon-Suk Chung. In *Proceedings of the Korea Institute of Communication Sciences Workshop*, Vol. 22, No.1, pp. 220-223, October 2000.

Fraud Detection & Management System in Mobile Communications. Cheong Yun-Gyung, Hyoung-Sun Park, Moon-Suk Chung. In *Proceedings of the Korea Institute of Communication Sciences Workshop*, Vol. 19, No.2, pp. 1374-1377, 1999.

Prediction of Eye Trajectories Based on the ART Neural Network. Jong-Hei Ra, Yun-Gyung Cheong, Moon-Hyun Kim. In *Proceedings of the International Conference on Artificial Intelligence (IC-AI2000)*, vol. 2, pp. 845-850, Las Vegas, NV, June 2000.

#### **Other Publications:**

*Automatic Generation of Warning Instructions from Plan Spaces*. Yun-Gyung Cheong. Technical Report TR04-002, Liquid Narrative Group, Department of Computer Science, North Carolina State University, 2004.

#### **Patents:**

*Terminal Equipment Fraud Sensing And Management Method In Mobile Communication Network*. Yun-Gyung Cheong, Hyung-Sun Park, Moon-Suk Chung. Korea Patent No. 10-0298290-0000.

*Operator Command Processing Method In The Mobile Communication System*. Yun-Gyung Cheong. Korea Patent No. 10-0372342-0000.

*Terminal Fraud Sensing Management Apparatus And Method In Mobile Communication Network*. Yun-Gyung Cheong, Hak-Jae Shin. Korea Patent No. 10-2001-0002797.

## **RESEARCH AND PROFESSIONAL EXPERIENCE**

---

### **Research Assistant, North Carolina State University Raleigh, North Carolina, USA**

**8/2004–present**

#### **Narrative Generation for Suspense**

**8/2004–present**

Researching narrative generation and interactive drama; Designed and developed a framework to create a suspenseful story using planning technique using Visual .NET; Designing an experimental environment.

#### **Mimesis**

**8/2004–12/2004**

Developed registry module for an intelligent distributed system in C#.NET; Implemented XML encoding and decoding modules; Implemented message routing in a distributed system.

#### **Automated Warning Generation**

**8/2002–8/2003**

Reviewed dynamic user interface literature and natural language generation techniques; Researched and developed a prototype of an automated prohibitive instruction generation system; Developed plan operators for dynamically generated instructions in Window-based simulation environment.

### **Assistant Researcher, Research and Development Center, LG Electronics Seoul, South Korea**

**5/1998–3/2001**

#### **Home Location Register**

Implemented network management system interface on UNIX-based system; Implemented and maintained the operation and maintenance system using X Motif; Developed the operation and maintenance system for replicated HLR systems; Implemented real-time database manipulation interface; Developed web-based operation and maintenance system using C CGI, PHP, and Javascript; Trained new employees; Wrote user manuals and technical reports, and proposals.

**Authentication Center**

Researched security techniques; Designed and developed the fraud detection system using CLIPS; Maintained mobile applications protocol for the 2nd generation mobile systems; Implemented mobile applications protocol for the IMT-2000 systems; Implemented the operation and maintenance system; Held educational sessions for NEC developers; Wrote user manuals, technical reports, and proposals.

**Research Assistant, Sungkyunkwan University**  
**Seoul, South Korea**
**2/1996–2/1998****Eye Detection in Dynamic Images****10/1996–2/1998**

Researched neural network and dynamic image recognition; Applied ART neural network to predict eye trajectories; Devised an effective algorithm for eye detection; Wrote a technical report and managed project.

**Segmentation of Korean Hand Written Characters****3/1996–5/1997**

Reviewed character recognition literature; Implemented a graphical user interface to hand written recognition component; Wrote a technical report and managed project.

## **TEACHING EXPERIENCE**

---

**Teaching Assistant, Department of Computer Science, North Carolina State University**  
**Raleigh, North Carolina, USA**
**2001–2004**

Classes: Operating Systems, Compiler Construction, Database Management Systems, Artificial Intelligence. Graded assignments and projects; Held office hours regularly; Assisted developing and grading exams; Technical assistance with Java programming, C, MySQL, and LISP.

**Teaching Assistant, Department of Information Engineering, Sungkyunkwan University**  
**Seoul, South Korea**
**1996–1997**

Lectured on UNIX and circuit practice to classes of over 40 students; Developed the course syllabus; Developed lecture contents; Developed homework and tests; Graded homework and exams.

## **SKILLS**

---

Foreign Languages: native in Korean, fluent in English, familiar with French and Japanese  
 Language: C, C++, Java, Visual .NET, Visual C#, Smalltalk, Lisp, Prolog, Perl, Clipper, Fortran  
 Web: JSP, Java Servlet, Java Beans, Javascript, PHP, CGI, XML, HTML  
 OS: Windows, UNIX, LINUX

## **HONORS AND AWARDS**

---

Doctoral Consortium Scholarship to attend the Doctoral Consortium and AAAI conference 2006.  
 Awarded NCSU RA/TA Scholarship, Raleigh, NC, 2001–present.  
 Awarded National Scholarship, Korean government, 2001–2005.  
 Awarded *Grand Prize for developing new enterprise*, LG Electronics, Seoul, South Korea, 1999.  
 Awarded *LG Industrial-educational cooperation program scholarship*, Seoul, South Korea, 1997.  
 Awarded *Information Engineering Graduate Scholarship*, Sungkyunkwan University, 1996–1997.

## LEADERSHIP AND VOLUNTEER ACTIVITIES

---

### Leadership Activities

Treasurer of *Women in Computer Science*, North Carolina State University, 2005.

Treasurer of *Women in LG Electronics Research & Development Center*, 1999.

President of *The Voice of Science*, Sungkyunkwan University, 1993.

Representative of Information Engineering Undergraduate Student Association, Sungkyunkwan University, 1992–1993.

### Extracurricular Activities

Departmental Ambassador for Computer Science, North Carolina State University, 2003-present.

Member of *Korean Catholic Church Choir* in Raleigh, 2001–2003.

Keyboardist of a rock band, *Les fleurs du mal*, 1992–1996.

### Community Services

Member of *Nanoom*, a group for helping children from low-income families, 1998–2001.

Volunteer for First Year College Fair, September, 2005.

Volunteer for University Open House, October, 2005.

Volunteer for Service Raleigh and Relay for Life, April, 2004.

## REFERENCES

---

### **R. Michael Young, Ph.D.**

Department of Computer Science  
North Carolina State University  
Raleigh, NC 27695  
young@csc.ncsu.edu  
+1.919.513.3038

### **James Lester, Ph.D.**

Department of Computer Science North  
Carolina State University  
Raleigh, NC 27695  
lester@csc.ncsu.edu  
+1.919.515.7534

### **Jon Doyle, Ph.D.**

Department of Computer Science  
Campus Box 8206  
North Carolina State University  
Raleigh, NC 27695-8206  
Jon\_Doyle@ncsu.edu  
+1.919.513.0423

### **David Herman, Ph.D.**

Department of English  
Ohio State University  
Columbus, OH 43210-1370  
herman.145@osu.edu  
+1.614.292.6123

### **Moon-Hyun Kim, Ph.D.**

Department of Computer Engineering  
Sungkyunkwan University  
Seoul, South Korea  
mhkim@simsan.skku.ac.kr  
+82-31-290-7117

### **Tai-Myung Chung, Ph.D.**

Department of Computer Engineering  
Sungkyunkwan University  
Seoul, South Korea  
tmchung@ece.skku.ac.kr  
+82-31-290-7131