

# COLLEEN E VAN LENT

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## EDUCATION:

- PhD Computer Science, University of Pittsburgh, Pittsburgh, PA. 2002  
Thesis Title: *A Plan-Based Personal Cognitive Orthotic System*  
Advisor: Martha Pollack
- MS Computer Science, University of Pittsburgh, Pittsburgh, PA. 1999  
Masters project title: *Rationale-Based Monitoring: Application to Causal-Link Planning and Implementation in the Robotics Field*
- BS Computer Science, Kent State University Honors College, Kent OH 1996  
Thesis title: *Artificial Neural Networks: An Overview*

## HONORS AND AWARDS:

- 2015 Lecturers' Professional Development Fund Award  
2015 UMSI Award For Excellence in Education  
2006 College of Engineering Outstanding Faculty Designate  
2004 NASA Summer Faculty Fellow  
1996-2002 National Physical Science Consortium Fellow

## AREAS OF SPECIALIZATION:

Web Design (emphasis on Accessibility), Artificial Intelligence, Entertainment in Games, Plan Management, Reminder Systems, Robotics in Education, Execution Monitoring.

## WORK EXPERIENCE

- |          |                     |  |
|----------|---------------------|--|
| 2015 -   | Lecturer IV         | University of Michigan School of Information |
| 2012 -15 | Lecturer III        | University of Michigan School of Information |
| 2008-12  | Lecturer            | University of Michigan School of Information |
| 2006-08  | Associate Professor | California State University Long Beach       |
| 2003-06  | Assistant Professor | California State University Long Beach       |
| 2004     | Faculty Fellow      | NASA Jet Propulsion Laboratory               |
| 1999     | Contractor          | Naval Research Lab, Washington, DC           |
| 1997     | Research Scientist  | National Security Agency                     |
| 1996     | Research Scientist  | National Security Agency, Fort Meade MD      |

## COURSES MOST FREQUENTLY TAUGHT

- University of Michigan School of Information  
SI 339 Complex Web Design  
SI 539 Complex Web Design  
SI 206 Data-Oriented Programming

## OTHER COURSES

### University of Michigan School of Information

SI 364 Database Design  
SI 664 Database Design  
SI 543 Programming I

## RESEARCH EXPERIENCE

### **Recent Research Collaborations:**

Summer **NASA Summer Faculty Fellow**

2004 NASA Jet Propulsion Laboratory, Pasadena, CA  
Development of software for the capture of Deep Space Network scheduling requirements

Feb-Oct **Researcher,**

2003 California State University Foundation, Long Beach, CA  
Development of algorithm to detect suspect container ships in international cargo. Project Title: Seaport Inspection Process and Technology Model: Inspection Technology, DOD/Space and Naval Warfare Systems Center.

### **Selected Prior Research Collaborations:**

2001/2002 University of Michigan AI Lab, Ann Arbor, MI  
1999 Naval Research Lab, Washington, DC  
1996/1997 National Security Agency, Fort Meade, MD

## PROFESSIONAL AFFILIATIONS

American Association of Artificial Intelligence (1997-Present)  
American Society for Engineering Education (2006 – Present)  
Association of Computer Machinery (2004- Present)  
Society of Women Engineers (2003-Present)

## PUBLICATIONS (\*Some work published under maiden name of McCarthy)

### **BOOKS FOR CHILDREN**

van Lent, C. and van Lent C. 2018. *Making a Web Page*. Ann Arbor, MI: Cherry Lake Publishing.

van Lent, C. 2015. *More Web Design With HTML5*. Ann Arbor, MI: Cherry Lake Publishing.

van Lent, C. 2014. *Web Design With HTML5 (Makers as Innovators)*. Ann Arbor, MI: Cherry Lake Publishing.

## **CONFERENCES, JOURNALS, AND BOOK CHAPTERS**

C. van Lent, A. Argueta, R Casella, and N. Jahns, "Robots in Education: Student Perspectives from the Classroom and from the Field", To appear in, the 2007 AAAI Spring Symposium on Robots and Robot Venues: Resources for AI Education, Stanford, CA, 2007.

C. van Lent, "Supplementing Robotic Assistants with the Ability to Remind Forgetful Users", *National Conference on Education Robotics*, San Jose, CA, 2004.

C. E. van Lent, "Using Robot Platforms to Enhance Concept Learning in Introductory Computer Science Courses", *Proceedings of the American Association of AI Spring Symposium*, Stanford, CA, 2004.

M. E. Pollack, L. Brown, D. Colbry, C. E. McCarthy, C. Orosz, B. Peintner, S. Ramakrishnan, and I. Tsamardinos, "Autominder: An Intelligent Cognitive Orthotic System for People with Memory Impairment," *Robotics and Autonomous Systems*, 44(3-4):273-282, 2003.

C.E. McCarthy and M. E. Pollack, "A Plan-Based Personal Cognitive Orthotic for the Elderly," *6th International Conference on AI Planning & Scheduling (AIPS-02)*, April 2002.

M. E. Pollack, C.E. McCarthy, Ioannis Tsamardinos, and Sailesh Ramakrishnan, "Execution-Time Plan Management," Plan-based Control of Robotic Agents, Michael Beetz, editor Spring 2002.

M. E. Pollack, C.E. McCarthy, Ioannis Tsamardinos, Sailesh Ramakrishnan, Laura Brown, Steve Carrion, Dirk Colbry, Cheryl Orosz, and Bart Peintner, "Autominder: A Planning, Monitoring, and Reminding Assistive Agent," *Proceedings of the 7th International Conference on Intelligent Autonomous Systems (IAS-7)*, 2002.

C. E. McCarthy and M. E. Pollack, "Towards Focused Plan Monitoring: A Technique and an Application to Mobile Robots," Autonomous Robots, 9:71-81, August 2000.

M. E. Pollack and C. E. McCarthy, "Towards Focused Plan Monitoring: A Technique and an Application to Mobile Robots," *International Symposium on Computational Intelligence in Robotics and Automation (CIRA)*, November 1999.

## **PRESENTATIONS**

### **Panelist:**

- March 2017 Boulder, CO  
Coursera Partners Conference. Invited Panelist for Instructor and Course Teams Track – Coursera 101: Tools and Pedagogy for Creating High-Quality Content.

### **Invited Speaker:**

- October 2017 University of Michigan  
Keynote speaker at the Michigan Chapter of the National Society of Collegiate Scholars (NSCS) Induction ceremony.

### **Guest Lectures:**

- June 2017 University of Michigan  
ICOS Big Data Summer Camp. Guest lecturer in Python at event designed to make big data accessible for people with no prior background.
- June 2016 University of Michigan  
ICOS Big Data Summer Camp. Guest lecturer in Python at event designed to make big data accessible for people with no prior background.
- May 2015 University of Michigan  
ICOS Big Data Summer Camp. Guest lecturer in Python at event designed to make big data accessible for people with no prior background.
- May 2014 University of Michigan  
ICOS Big Data Summer Camp. Guest lecturer in Python at event designed to make big data accessible for people with no prior background.
- May 2013 University of Michigan  
ICOS Big Data Summer Camp. Guest lecturer in Python at event designed to make big data accessible for people with no prior background.

## **PROFESSIONAL ACTIVITIES**

July 2008 Chicago, IL  
Chair, American Association of Artificial Intelligence Doctoral Consortium

July 2007 Victoria, British Columbia  
Co-chair, American Association of Artificial Intelligence Doctoral Consortium

Jun 2004 Villanova University  
Learning Outside the (Desktop) Box, NSF Workshop

## **SERVICE**

### **Department Level:**

Undergraduate Curriculum Committee 2013 - Present

### **University Level:**

Being a Faculty Member in the 21<sup>st</sup> Century Committee 2014

First Generation Student Group 2015-Present

CRLT Faculty Advisory Board 2016 - Present

### **Other:**

NSF Review Panel 2014

NSF Review Panel 2013

Women in Tech Panel (CISCO event at UM) 9/20/2013

### **Community:**

Programming Coach, Wines Elementary School 2015-Present  
Parent coach for the WESO iCompute Programming team

Volunteer, Forsythe Middle School Science Fair 2017

Web Developer, Forsythe Middle School Science Fair 2011- 2016  
Assist the Science Fair coordinator with web design needs

Volunteer, Kent State Rural Scholars Program March 4, 2016  
The Rural Scholars program offers first-generation college-bound students opportunities to prepare for and learn more about college expectations and experiences. I traveled to Salem Ohio and led a workshop on Web Development to a group of high school students.

Volunteer Teaching Assistant, Girls Develop It Ann Arbor Sept 14th, 2015  
I served as a TA for the Introduction to JavaScript workshop offered by GDI Ann Arbor.

Parent Volunteer, Classroom Extra Specials Wines Elem. Jan 2014  
Spend one day a week teaching students Scratch Jan 2015  
Programming during their lunchtime recess.  
(7 week session each year)

Parent Volunteer, FIRST Robotics Sept – Nov 20014  
Assisted six 4<sup>th</sup> graders in a newly formed FIRST Robotics team

Web Design, Lawton Middle School 2012-2014  
Oversaw a UMSI student who helped Lawton Middle School with a revamp of their website.