

Curriculum Vitae
Dr. E. Anne Gates Applin

Department of Computer Technology
Southern Maine Community College
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EDUCATION

- Ph.D., Computer Science Education, 1999
 Doctoral minor: Computer Engineering Technology
 Center for Science and Mathematics Education.
 University of Southern Mississippi, Hattiesburg, MS.
 Dissertation: "The Application of Language Acquisition Theory to Programming
 Concept Instruction: Chunks Versus Programs from Scratch,"
 Hugh P. Garraway III (research director).
- M.S., Computer Science 1994
 Department of Computer Science and Statistics, University of Southern Mississippi.
 Master's Project: "An Expert System Room Reservation System."
 Ralph B. Bisland, Jr., advisor.
- B.S., Computer Information Systems and Scientific Computing. 1992
 Department of Computer Science, Southeastern Louisiana University,
 Hammond, LA.

EMPLOYMENT

- Assistant Professor, Computer Technology, Southern Maine Community College 2011 - present
Visiting Assistant Professor, Computer Science, Millsaps College 2010 – 2011
Assistant Professor, Computer Science, Ithaca College. 2003 – 2010
Visiting Scholar, Software Quality Research Laboratory, U of Tennessee, Knoxville. summer 1999
Instructor, Computer Science, Pearl River Community College. 1993 – 2003
Graduate Teaching Assistant, Computer Science, U of Southern Mississippi. 1992 – 1994
Computer Operator (student worker), Academic Computing, Southeastern La. U. 1989 – 1992
Data Processing Manager, Bayou Federal Credit Union. 1983 – 1987

PEER-REVIEWED PUBLICATIONS

- Almstrum, Vicki L. and **Applin, E. Anne G.** and Owens, Barbara Boucher and Adams, Elizabeth and Barker, Lecia J. and Impagliazzo, John and Joseph, Patricia A. and Kahlon, Amardeep and Last, Mary Z. and Lawrence, Andrea and Young, Alison Innovation and Technology in Computer Science Education (ITiCSE'08, Madrid, Spain) Working Group Report: *Computing educators oral history project: seeking the trends.* ACM SIGCSE Bulletin, Inroads 40 (4) pp 122-141
- Applin, A.**, Holz, H., Joel, W., Okoye, I., Deibel, K., Grasser, B., Oates, B., Wood, G. Innovation and Technology in Computer Science Education (ITiCSE'07, Dundee, Scotland, UK) Working Group Report: *A Multi-Perspective Digital Library to Facilitate Integrating Teaching Computing Research Methods Across the Curriculum.* ACM SIGCSE Bulletin, Inroads 39 (4) pp. 184 - 203
- Holz, H., **Applin, A.**, Joel, W. *Status Report of the Committee and Working Group on Teaching Computing Research Methods.* Proceedings of the 38th SIGCSE Technical Symposium on Computer Science Education, 39 (1) pp. 327-328. Presented at a Special Session March 9, 2007, Covington, Kentucky, USA.

PEER-REVIEWED PUBLICATIONS (continued)

Holz, H., **Applin, A.**, Haberman, B., Joyce, D., Purchase, H., Reed, C. Innovation and Technology in Computer Science Education (ITiCSE'06, Bologna, IT) Working Group Report: *Research Methods in Computing: What are they, and how should we teach them?* ACM SIGCSE Bulletin, Inroads 38 (4) pp. 96 - 114.

Woodworth, P, **Applin, A.** *A Hybrid Structure for the Introductory Computers and Information Technology Course* Journal of Computing Sciences in Colleges, 22 (1) pp. 136-144.

Applin, A., Holz, H. *The SIGCSE Committee on Teaching Computer Science Research Methods (CSRMS)* ACM Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education, 38 (1) pp. 576. Conference Birds-of-a-feather Session, March 3, 2006. Houston, Texas, USA.

Applin, A. G., *A Learner-Centered Approach to Teaching Ethics in Computing* Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education, 38 (1) pp. 530-534. Conference Paper Session, March 4, 2006, Houston, Texas, USA.

Owens, B., **Applin, A. G.**, Abunawass, A, Baker, L, Luginbuhl, D., Way, M. *Challenges of Teaching in a Small Computing Department* Journal of Computing Sciences in Colleges, 18 (4) p. 94. Conference Panel Session, April 12, 2003, Jackson, Mississippi, USA.

Applin, A. G. *Second Language Acquisition and CS1: Is * = = **?* Proceedings of the 32nd SIGCSE Technical Symposium on Computer Science Education, 33 (1) pp. 174-178. Conference Paper Session, February 24 2001, Charlotte, North Carolina, USA.

PRESENTATIONS, POSTERS, PANELS, TALKS, BOFS AND WORKSHOPS

Using Oral Histories in Computing Education (birds-of-a-feather). Grace Hopper Celebration of Women in Computing. October 1-4, 2008, Keystone, CO., USA

Bringing Stories to the World: The Technical Challenges of CEOHP (poster). Grace Hopper Celebration of Women in Computing. October 1-4, 2008, Keystone, CO, USA .

Innovative Technology Experiences for Students and Teachers (workshop) University of Mississippi, July 7-11, 2008, Oxford, Mississippi, USA. (NSF DRL0624528)

Computing Research Methods Multi-Perspective Digital Library: A Call for Participation (poster) ITiCSE'08 Innovation and Technology in Computer Science Education. June 30 - July 2, 2008 Madrid, Spain.

CEOHP: The Computing Educators Oral History Project:(poster). Conference and workshop on History | Gender | Computing. Charles Babbage Institute, University of Minnesota. May 30-31, 2008, Minneapolis, Minnesota, USA.

Describing the past to build for the future: The stories of CEOHP (poster) Grace Hopper Celebration of Women in Computing, October 17, 2007. Orlando, Florida, USA.

Storytelling as Role Modeling: Collecting Oral Histories, (workshop) Grace Hopper Celebration of Women in Computing, October 19, 2007. Orlando, Florida, USA.

The Computing Educators Oral History Project: Planning for the Future. (poster) ITiCSE'07 Innovation and Technology in Computer Science Education. Dundee, Scotland, UK.

PRESENTATIONS, POSTERS, PANELS, TALKS, BOFS AND WORKSHOPS *(continued)*

Successful Teaching: Creating Video Tutorials, (workshop) Conference on Successful Teaching. Sponsored by the Institute for Community College Development (A SUNY and Cornell University Partnership) October, 27 2006. Corning, New York, USA .

An Introductory VR Course for Undergraduates Incorporating Foundation, Experience and Capstone 36th SIGCSE technical symposium on Computer Science Education, St. Louis, Missouri, USA.

Filling the Holes. ACM Mid-Southeastern Chapter Conference, November 1, 1997. Gatlinburg, Tennessee, USA.

Computer Use in Chinese Schools, Report of the 1995 Computer Science Delegation of People to People International to China. Presented to the students of Computers in Education at the University of Southern Mississippi, Fall 1995 and to the Faculty at Pearl River Community College, Spring 1996.

Computer Vision. An overview of robotic vision systems presented to faculty members and students at Pearl River Community College, Spring 1992 as an in-service.

STUDENT CENTERED ACTIVITIES

Invited Speaker - *Research Methods in Computer Science* REU Site: Research Experiences for Undergraduates in Virtual Reality, Visualization, and Imaging. National Science Foundation grant (CNS-0353687) 2004-2006, and National Science Foundation grant (IIS-0648211) 2007-2009.

Faculty Sponsor / Coach for the Pearl River Community College's State Community College Programming Competition Team (1994 - 2003 won two 1st place, a 2nd, and a 3rd).

Faculty Advisor for the Pearl River Community College student chapter of the ACM. (1996 - 2003).

Organizer for the Pearl River Community College District High School Programming Competition (1998-2002)

GRANTS, AWARDS AND HONORS

Computer Science Education Classroom Research Fall 2008
Collaborative research: Alice += Java. Wanda Dann, PI. IC in collaboration with Carnegie Mellon University will be a test site for software and curricular materials. Released time funded by the National Science Foundation (\$50,003 – DUE:CCLI – 0736552).

Curriculum Development Spring 2008
Alice += Java. Alpha test site for software and curricular materials a collaboration with Carnegie Mellon University. Released Time (3 hours) awarded from the Center for Faculty Research & Development, Ithaca College.

Special Projects Grant Spring 2008
 ACM Special Interest Group in Computer Science Education, \$5,000 “Building a multi-perspective digital library to facilitate teaching computing research methods across the curriculum”.

Curriculum Development Spring 2007
Development of software and course syllabus for incorporating robotics into the computer science department's research and curriculum. Released Time (3 hours) awarded from the Center for Faculty Research & Development, Ithaca College.

GRANTS, AWARDS AND HONORS (continued)

- Computing Educator's Oral History Project (Advisory Board member)* 2007 - present
 This project is a multi-year grass roots attempt to understand diversity factors in computer science.
 This project is building a digital library of interviews of computing educators in an attempt to improve the number of women and girls entering computing. Funded by the National Science Foundation (CNS:CISE – 0710536).
- Entry Level Technology Standards Committee* 1999 - 2001
 Multi-institution committee composed of faculties from the University of Southern Mississippi, several community colleges and high schools in southern Mississippi. The group established common expectations regarding the entry level of computer competency of students transferring into, or entering the Education program at, the University of Southern Mississippi. Based on those expectations the group then developed prototypes for practical examinations on word processing, spreadsheet, and database applications. Funded by a Department of Education "Preparing Tomorrow's Teachers to use Technology" Capacity Building Grant.
- Filling the Holes.* 1997
 A research study about what student written algorithms can reveal about holes in understanding lecture topics. Awarded second place in the ACM Mid-Southeastern Chapter Doctoral Paper Competition.
- Upsilon Pi Epsilon computer science honor society. 1991- present
- Gamma Beta Phi national honor society. 1992 - present
- Who's Who in American Universities and Colleges 1992

PROFESSIONAL ACTIVITIES

- Working Group Co-Chair* "Computing Educator's Oral History Project: Seeking the Trends," (ITiCSE'08) V. Almstrum, A. G. Applin, B. B. Owens.
- Working Group Co-Chair* "A Multi-perspective Digital Library to Facilitate Integrating Teaching Research Methods Across the Computing Curriculum," (ITiCSE '07) **A. G. Applin** and H. J. Holz.
- Paper Session Moderator:* CS Education Research. ITiCSE'07
- Working Group Co-Chair* "Research Methods in Computer Science: What are they and how should we teach them?" (ITiCSE '06) H. J. Holz and **A. G. Applin**.
- Co-Founder and Co-chair,* ACM SIGCSE Committee on Teaching Computer Science Research Methods. 2005 - 2010
- Judge,* Graduate and Undergraduate divisions, ACM Student Research Competition. 1998 – present
- Journal Reviewer* ACM Special Interest Group on Computer Science Education. 2007 (on-going)
- Journal Reviewer* Computer Science Education special issue on import/export relationships to computer science education research. 2004
- Journal Reviewer* Psychology of Programmers Interest Group (PPIG journal). 2004

PROFESSIONAL ACTIVITIES *(continued)*

Computing Sciences Curriculum Task Force of the ACM Two-Year College Education Committee This task force created a curriculum and articulation guide for two-year colleges in the area of computing sciences to be coordinated with the ACM/IEEE Computer Science 2001 Curriculum Report.

ACM SIGCSE 2002 Symposium Committee Community College Liaison for the 2002 conference in Northern Kentucky.

ACADEMIC SERVICE

Information Technology Planning and Advisory Committee 2007 -2010

The Information Technology Planning and Advisory Committee (ITPAC) advises the President of Ithaca College on campus-wide information technology planning and priorities. ITPAC develops and maintains a strategic information technology plan that supports the College's mission, Institutional Plan, and academic, administrative and outreach activities.

CS Department Web Site 2007 - 2010

Sharon Stansfield and I designed and maintain the CS web site

COMP110 (Computer and Information Technology) Course Committee 2004-2010

On going committee that designs and develops activities and assessments for the hybrid course.

Personnel Committee 2003, 2008

Ithaca College Computer Science faculty committee of the whole.

Curriculum Committee 2003 - 2010

Ithaca College Computer Science faculty committee of the whole maintains a curriculum that is in keeping with standards set by accrediting boards.

Assessment Committee 2003 - 2010

Ithaca College Computer Science faculty committee of the whole develops tools and methods to assess attainment of course goals for each course in the curriculum.

Pearl River Community College Technology Committee 1995 - 2003

The president of PRCC consults with this 11 member committee on computing services.

National Science Foundation proposal review panel participant. 2 in 2000, 2 in 2001

People To People International© Ambassador October 12-28, 1995

Our group of 36 CS educators and industrial practitioners exchanged ideas about educational uses of computers with our colleagues in Chinese schools. At each school we were given an overview of computer uses and policies and watched classrooms or laboratories full of students working on projects. The experience led to several continuing collaborations. Schools visited: No.2 Experimental Elementary School, Jingshan K-12 School, Beijing Normal University, Hangzhou Advanced High School, Zhejiang University, East China Normal University, and Yifu Vocational & Polytechnic School.

INSTRUCTIONAL EXPERIENCE

Millsaps College:

Courses Taught: Problem Solving with Computer Applications, Computer Science I, Computer Organization and Machine Programming, Theory of Operating Systems, Computer Ethics.

Ithaca College:

Courses taught: Computer and Information Technology, Principles of Computer Science I. Advanced Web Programming, Ethical Issues in the Computing Field. Computer Networking. Senior Projects advisor.

INSTRUCTIONAL EXPERIENCE *(continued)*

Courses developed: *Computer and Information Technology* (in committee) hybrid course combining on-line education with in-class projects. The course teaches problem based learning with a spreadsheet and database toolkit . In collaboration with other faculty, the group is continuing to review ways to increase concept retention, facilitate learning-to-learn skills, strengthen group interaction skills, and increase the quality of in-class time-on-task hands-on learning activities. The group is developing exercises in cooperation with other Humanities & Sciences departments and the School of Business to increase student understanding of discipline specific real-world application of course skills.

Ethical Issues in the Computing Field The course investigates ethical decisions and alternatives through contemporary film, both full length movies and selected television episodes.

Pearl River Community College:

Courses taught: Introduction to Computing, Introduction to Programming, Introduction to FORTRAN Programming, Introduction to Computing and Business Applications. Computer Science I, Computer Science II, Discrete Mathematical Structures of Computer Science.

Courses developed: Introduction to Computing and Business Applications. Wrote and maintained the lab manual for our totally hands-on course.

Administrative Duties: Course scheduling and faculty assignments, training and supervision of undergraduate student assistants, coordination of adjunct instructors in the academic area, liaison with our university computer science department (80% of our students attended U of Southern Miss). Made purchase decisions for computer equipment for the department. Systems administrator for the CS department network.

University of Southern Mississippi

Courses taught: Computer Science I Lab, Computer Science II Lab, Introduction to Programming and Problem Solving.

WORKSHOPS & SEMINARS ATTENDED

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|--|-------------------|
| <i>Rebooting Computing Summit</i> | January 12-14 |
| The goal of the summit was to design projects to transform our field through activities to boost recruitment and increase diversity. | |
| <i>Alice Beta Tester's Workshop</i> | January 5-6, 2009 |
| Sponsored by: Carnegie Mellon University, Pittsburgh, PA, USA | |
| <i>Alice Summer Institute</i> | July 16-22, 2007 |
| Sponsored by: Carnegie Mellon University, Pittsburgh, PA, USA | |
| <i>Faculty Workshop on Network Administration.</i> | July 15-19, 2002 |
| Sponsored by the NSF (DUE-9952454) & Rockhurst University, Kansas City, MO, USA. | |
| <i>Compressed video instruction workshop.</i> (1 ½ Continuing Education Credits) | 1999 |
| Pearl River Community College, Poplarville, MS, USA. | |
| <i>SIGCSE Doctoral Consortium</i> | March 24, 1999 |
| SIGCSE Technical Symposium Pre-Conference Workshop, New Orleans, LA, USA | |
| <i>Research Methods in Computer Science Education: Focus on Quantitative Methods.</i> | March 1, 1998 |
| SIGCSE Technical Symposium Workshop, Atlanta, GA, USA. | |

WORKSHOPS & SEMINARS ATTENDED *(continued)*

<i>Active and Group Learning Techniques for Computer Science</i> SIGCSE Technical Symposium Workshop, Atlanta, GA, USA.	February 28, 1998
<i>Collaborative Learning</i> SIGCSE Technical Symposium Workshop, Atlanta, GA, USA.	February 27, 1998
<i>Multimedia Applications.</i> SIGCSE Technical Symposium Workshop, Philadelphia, PA, USA.	February 18, 1996
<i>Successful Proposal Writing for NSF Programs.</i> SIGCSE Technical Symposium Workshop, Nashville, TN, USA.	March 3, 1995

PROFESSIONAL ASSOCIATION MEMBERSHIPS

Association for Computing Machinery (ACM).	1991 - present
ACM special interest group on Computer Science Education (SIGCSE).	1992 - present
ACM special interest group on Computers and Society (SIGCAS).	1999 - present