

## **CURRICULUM VITAE**

**Ann Ford Tyson**

*(formerly known as Ann R. Ford)*

**Department of Computer Science**

**253 Love Building**

**Florida State University**

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### ***EDUCATION***

Master of Science in Computer & Communication Sciences, April 1983

Orenstein Graduate Fellowship, 1981-1983

University of Michigan, Ann Arbor, Michigan

Bachelor of Arts in Psychology, Summa Cum Laude, May 1979

State University of New York at Buffalo, Buffalo, New York

### ***PROFESSIONAL EXPERIENCE***

*Research Associate in Computer Science:* August 2011 – present, Department of Computer Science, Florida State University, Tallahassee. Taught and managed courses ranging in size from 12 to 2,200. Directed teams of teaching assistants ranging in size from 1 to 33.

*Associate in Computer Science:* August 2003 – July 2011, Department of Computer Science, Florida State University, Tallahassee.

*Director of Undergraduate Studies, Computer Science:* August 2007 – August 2008, Department of Computer Science, Florida State University, Tallahassee.

*Assistant Director of Undergraduate Studies, Computer Science:* August 2005 - August 2006, Department of Computer Science, Florida State University, Tallahassee.

*Lecturer:* September 1992 - August 2003, Department of Electrical Engineering & Computer Science, University of Michigan, Ann Arbor. Taught classes ranging in size from 20 to 500, managed teams of graduate student teaching assistants and graders.

*Undergraduate Program Advisor, Computer Science-LS&A:* August 1994 - August 2003, concentration advising for Computer Science program, University of Michigan, Ann Arbor.

*Chief Undergraduate Program Advisor, Computer Science-LS&A:* September 1998 - August 2002, Directed CS advising team and performed concentration advising for Computer Science undergraduates, University of Michigan, Ann Arbor.

*Reviewing/Editing Computer Science textbooks:* September 1992 - present. Free-lance, for various publishers.

*Adjunct Lecturer:* July 1992 - August 1992, Comprehensive Studies Program, University of Michigan, Ann Arbor. Taught computer literacy to entering minority freshman in the CSP Summer Bridge Program.

*Adjunct Lecturer:* January 1988 - September 1992, Department of Electrical Engineering & Computer Science, University of Michigan, Ann Arbor. See prior entry.

*Application Programmer:* May 1982 - August 1982, Department of Corporate Quality Assurance, Manufacturing Data Systems Incorporated, Ann Arbor. Designed, wrote and tested issue tracking software for in-house use. Developed external documentation, functional specifications and user specifications. Trained company personnel to use software developed.

*Research Assistant:* Part-time, January 1981 - August 1981, Department of Chemistry, State University of New York (SUNY) at Buffalo. Updated and documented crystallography program library and trained new staff members in use of the computer system.

*Laboratory Technician:* August 1979 - December 1980, Department of Behavioral Science, School of Dentistry, SUNY at Buffalo. Wrote applications programs for statistical analyses, debugged existing software, and wrote a user manual for the statistical program library. Trained staff members in the use of this system. Utilized biofeedback, GSR and questionnaires to study patient stress during dental treatment. Counseled and trained patients in relaxation techniques to reduce pain. Edited journal articles prior to submission.

*Student Assistant:* January 1979 - May 1979, Office of Vice President for Academic Affairs, SUNY at Buffalo. Part-time.

*Research Technician:* May 1977 - August 1977, Departments of Pediatrics and Psychology, SUNY at Buffalo. Performed behavioral studies to investigate the effect of phenylalanine on rat cognitive ability. Directed project and two other technicians whenever principal investigators were unavailable. Constructed electrical equipment. Set up and maintained records of experimental data and its analysis.

*Professional Musician and Guitar Instructor:* Part-time, October 1974 - August 1976.

### ***HONORS and AWARDS***

- € Nominated, University Teaching Award, Florida State University, 2009-2010
- € College of Engineering Non-Tenure Track Faculty Award for Teaching Excellence, University of Michigan, February 2002
- € Richard Orenstein Graduate Fellowship, University of Michigan, 1981-1983
- € Phi Beta Kappa, 1979
- € B.A. Summa Cum Laude, SUNY at Buffalo, 1979
- € New York State Regents Scholarship, 1974-1979

### ***TEXT BOOKS AUTHORED***

*Practical Debugging in C++*, by Ann Ford Tyson, Toby J. Teorey and Gary S. Tyson, Pearson Custom Publishing, 3<sup>rd</sup> Edition, 2011.

*From C++ to C: What You Need to Know for Systems Programming*, by Ann F. Tyson, seeking publication, currently in use in various FSU computer science courses, 2007.

*Practical Debugging in C++*, by Ann R. Ford, Toby J. Teorey and Gary S. Tyson, Pearson Custom Publishing, 2<sup>nd</sup> Edition, 2005.

*JAVA Debugging Guide*, by Sandra Bartlett, Gary S. Tyson, Ann R. Ford and Toby J. Teorey, Pearson Custom Publishing, 2005.

*Practical Debugging in JAVA*, by Sandra Bartlett, Gary S. Tyson, Ann R. Ford and Toby J. Teorey, Prentice-Hall Inc., 2003.

*Practical Debugging in C++*, by Ann R. Ford and Toby J. Teorey, Prentice-Hall Inc., 1<sup>st</sup> Edition, 2002.

### ***JOURNAL PUBLICATIONS***

Gary S. Tyson, Ann Ford Tyson, "Medical Applications for Android Powered Mobile Systems," CSI Communications, pp. 8-10, April 2011.

### ***CONFERENCE PUBLICATIONS***

John T. Bell, Ann Ford, Susan Montgomery, Dale Reed, Cathleen Theys, Patrick A. Troy, "Lecturer - An Alternative to the Tenure Track," Proceedings of the 2002 American Society for Engineering Education Annual Conference and Exposition, June 2002.

### ***COMMITTEE SERVICE at FLORIDA STATE UNIVERSITY***

Chair, Computer Science Undergraduate Curriculum Committee, 2005-2006, 2007-2008  
Member, Computer Science Undergraduate Curriculum Committee, 2003-2005, 2006-2007  
Florida Statewide Course Numbering System Faculty Discipline Committee on Computer Science, 2004-2006  
Chair, Computer Science Undergraduate Curriculum Revision Sub-Committee, 2004-2005  
Administrative Panel Chairperson Volunteer for Student Conduct Code Hearings, 2004-present  
Honor Panel Member Volunteer for Student Honor Code Hearings, 2004-present  
Computer Science Teaching Evaluation Committee, 2003-2004

### ***COMMITTEE SERVICE at UNIVERSITY OF MICHIGAN***

College of Engineering EECS Departmental Chair Search Committee, 2001-2002  
Computer Science and Engineering Undergraduate Curriculum Committee, 1994-2001  
Committee to Study Undergraduate Programs in EECS, 1999-2000  
Computer Science Undergraduate Program Internal Review Committee, 1998

### ***PROFESSIONAL SOCIETIES***

Association for Computing Machinery (ACM)  
Association for Computing Machinery's Special Interest Group for Computer Science Education (SIGCSE)

### ***MAJOR WORKSHOP and CONFERENCE PARTICIPATION***

CRA-W CAPP (Computing Research Association-Women) Advanced Career Mentoring Workshop, November 2008  
SIGCSE Annual Conference 2001, 2003, 2004, 2009

National Effective Teaching Institute, Richard M. Felder Co-Director, sponsored by  
American Society for Engineering Education (ASEE), June 2000

### ***COURSES TAUGHT***

First Semester Programming in C++, C, Python and Pascal  
Second-Semester Object-Oriented Programming in C++  
Introduction to Computer Science, bottoms-up approach to both hardware and software, using  
machine language, assembly language and C  
Computer Fluency

### ***ADMINISTRATIVE SKILLS***

Extensive committee service including EECS Chair Search at University of Michigan, Chair of  
Undergraduate Curriculum Committee at Florida State and department internal review  
committee (see prior sections)  
Coordinated computer science program jointly run by College of Engineering and College  
of Literature, Science and the Arts  
Managed computer science undergraduate advising team comprised of both faculty and staff  
as well as performed student advising, accepted or declined admittance to program  
evaluated students for honors degree conferral, and evaluated transfer credits  
Trained and supervised teaching assistant teams of up to 12 graduate and undergraduate students  
Performed course scheduling for computer science department  
Served as faculty advisor on honor code violation cases as well as representative at hearings  
Served as disciplinary hearing chairperson for student conduct code violation cases  
Set up and ran annual computer science honors and awards ceremony  
Set up and ran evening open-house for purpose of recruiting more undergraduate majors for  
computer science

### ***TEXT BOOKS and MANUSCRIPTS REVIEWED/EDITED***

*Starting Out with Python*, Competitive Review of 1st edition, Chapters 1 through 12, by Tony  
Gaddis, Addison-Wesley, 1st edition 2009, Competitive Review 2010.  
*Starting Out with C++: From Control Structures to Objects*, Revision Proposal for 7th edition,  
by Tony Gaddis, Addison-Wesley, 6th edition 2008, Revision Proposal 2010.  
*Starting Out with C++: From Control Structures to Objects*, Chapter 13, "Introduction to  
Classes," by Tony Gaddis, Addison-Wesley, 5th edition, 2007.  
*C++ Program Design: An Introduction to Programming and Object-Oriented Design*, Chapter  
12, "Testing and Debugging," by James Cohoon and Jack Davidson, McGraw-Hill, Inc., 3rd  
edition, 2002.  
*From Bits and Gates to C and Beyond*, Chapters 1 through 19, by Yale Patt and Sanjay Patel,  
McGraw-Hill Inc., 1999 (2nd review).  
*From Bits and Gates to C and Beyond*, Chapters 1 through 18, by Yale Patt and Sanjay Patel,  
McGraw-Hill Inc., 1998.  
*Introduction to Object-Oriented Programming with JAVA*, Chapters 1 through 11 (final draft),  
and partial Instructor's Manual, by C. Thomas Wu, Richard D. Irwin, Inc., 1998.

*Patterns in Computer Science Using JAVA*, Chapters 1 through 21 (entire text), by Edward C. Epp, McGraw Hill Inc., 1997.

*Programming and Problem Solving with C++*, revision proposal for 2nd edition, by Nell Dale, Chip Weems, and Mark Headington, Jones & Bartlett Publishers, 1997.

*C++ Programming for Engineers*, proposal, by Martin Mintchev, Oxford University Press, 1997.

*Programming with Class*, Chapters 1, 2, 10, Preface and Table of Contents, by Kamin, Mickunas and Reingold, Richard D. Irwin, Inc., 1997.

*Introduction to Object-Oriented Programming with JAVA*, Chapters 1 through 8 (first draft), by C. Thomas Wu, Richard D. Irwin, Inc., 1996.

*Introduction to Programming: An Object-Oriented Approach with C++*, Chapters 1 through 18 (final draft, entire text), by C. Thomas Wu and Theodore Norman, Richard D. Irwin, Inc., 1996.

*Data Structures, Algorithms, and Applications*, Chapters 1 through 3, by Ellis Horowitz and Sartag Sahni, W.H. Freeman and Company, 1995.

*Introductory Computer Science: Bits of Theory, Bytes of Practice*, Chapters 6 through 10, by A. K. Dewdney, W.H. Freeman and Company, 1995.

*C++ Program Design: An Introduction to Programming and Object-Oriented Design*, Prospectus, Table of Contents, and Chapters 4, 5, 8, and 9, by James Cohoon and Jack Davidson, Richard D. Irwin, Inc., 1st edition, 1995.

*Introduction to Programming: Object-Oriented Approach with C++*, Chapters 1 through 13 (first draft), by C. Thomas Wu and Theodore Norman, Richard D. Irwin, Inc., 1994.

*Data Structures and C*, Table of Contents and Prospectus, by Mark Stehlik and Steve Elliot, John Wiley and Sons, Inc., 1994.

*Computer Science: A Breadth-First Approach with C*, Chapters 1 through 19 (entire text), by John Impagliazzo and Paul Nagin, John Wiley & Sons, Inc., 1993.

*Pascal: Understanding Programming and Problem Solving*, 3rd Edition (entire text), by Douglas Nance, West Educational Publishing, 1993.

*C++: An Introduction to Computing*, Chapters 6 through 12, by Nyhoff, Leetsma, and Adams, MacMillan Publishing Company, 1993.

*Program Development in Pascal*, Chapters 2 through 5, by Tom Warms, West Educational Publishing, 1992.

### **MAJOR ACADEMIC WORK and EXPERIENCE**

*Computer Science*: Data structures, compiler construction, graphics, database management, modeling, professional legal and ethical issues; HTML; Programming Languages: Python, C++, C, JAVA, Pascal, FORTRAN, BCPL, COBOL, Basic, ALGOLW, Assembler; Operating Systems: Windows, Mac OS X, UNIX

*Psychology*: Statistics, research methods; cognitive, physiological and abnormal psychology, sensory processes and human perception, clinical psychology and psychotherapy

*Mathematics*: Logic, probability, statistics, numerical analysis, linear algebra, differential equations, calculus

*Natural Sciences*: Physics, inorganic and organic chemistry

*Life Sciences*: Human physiology, genetics, biology

*Humanities*: English literature and poetry, creative writing, music theory, medical ethics; staff writer for student newspaper at SUNY Buffalo

## ***COMMUNITY VOLUNTEER WORK***

*Tutoring:* University level programming, elementary school level reading and math

*Research:* Biochemical, behavioral and biopsychological studies

*Hospital:* Adolescent Psychiatry, Geriatrics, Pharmacy, University of Michigan Medical Center  
Trauma/Burn Unit, fund-raising for University of Michigan Medical Center Save A Heart  
program

*Community High School:* Data recording and analysis at track and cross country meets