Ann Marie Tekina-eirú Grizzaffi Maynard

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Expertise: Leadership and Research

Awards*:*

Two Patent disclosures rated FILE in machine translation support, automatic language detection, 2009/10
IBM 2nd Invention Plateau, 3 patents in next-generation Globalization, 2008
IBM 1st Invention Plateau, 4 patents in the area of Next Generation Usability, 2007
IBM Research Division Award - "SimOS-PPC Development", October 2000
IBM Patent- "Efficient Address Translation Technique Bypasses Protection Checking", 1999
IBM Technical Author Recognition Award, Jan. 1995
IBM Outstanding Technical Achievement -"RS/6000 Memory Subsystem Analysis", Nov. 1994
Trailblazer Award from the Univ. of Texas at Austin, College of Natural Science, October 2003
Community Award – Austin YWCA Woman of the Year for Arts, October 2005

Education

Ph.D. in Electrical and Computer Engineering **January 1992**
Carnegie Mellon University, Pittsburgh, Pennsylvania
AT&T Cooperative Research Fellowship Program
Thesis: *Utilization of Idle Time in High Performance Processors*

Master of Science in Electrical and Computer Engineering **May 1986**
Carnegie Mellon University, Pittsburgh, Pennsylvania
Thesis: *Fault-Free Performance Validation of Fault-Tolerant Multiprocessors*

Bachelor of Science in Electrical and Computer Engineering (cum laude) **May 1984**
Polytechnic Institute of New York, Brooklyn, New York
Eta Kappa Nu, Dean's List

IBM Leadership Excellence University **September 2002**

MicroMBA Program **April 2001**

Experience

Researcher/Senior Engineer
IBM Research Human Ability & Accessibility Center (HA&AC), Austin Texas July 2006 – Present
Ongoing research enhancing human ability and accessibility in the area of globalization, with speciality in next-generation multilingual support via machine translation. Current research focus is in automatic translation and multilingual TTS support of collaborative tools, including text-to-text and text-to-speech. Ground-breaking research has generated new patent disclosures rated FILE in the area of machine translation support of collaborate tools and automatic language detection.

Researcher/Senior Engineer
IBM Austin Research Laboratory & HA&AC, Austin Texas January 2005 – September 2007
Conducted research for IBM CIO Innovations in globalization and human factors for enterprise-grade multimodal applications for mobile devices. Globalization research developed next-generation multilingual support for an enterprise library management system for digital media using dynamic media synthesis. Human factors research for this project created a next-generation methodology that gives usability experts the capability to identify issues that degrade "user experience" for complex systems, applications, and products that contain layers of complexity not visible from user interface. Research generated two levels of Invention Plateaus (~8 patents). TAP Project prototype "graduated."

Program Director
IBM Austin Center for Advanced Studies (Austin CAS) February 2000 – July 2006
Developed and directed a $1M annual university research program that serves the IBM Austin Site. Austin CAS is dedicated to promoting and cultivating collaborative research between IBM organizations across the corporation and universities worldwide. With more than 30 IBM Research and Development business units on site driving innovative products and technologies, Austin CAS brings a focal point to the Site's university relationships. ACAS annually umbrellas approximately 30 projects per year with 20 universities

worldwide for a dozen IBM organizations that conduct research in future sytems, software and business strategies.

Senior Engineer **September 1997 - February 2000**
IBM Austin Research Laboratory, Austin, Texas
Lead the performance focus of IBM's Full System Simulation Project, SimOS-PPC. The goal of this project was to provide IBM with a software environment that would facilitate the design of high performing systems for Server and PC Server markets. Conducted early performance work with first customers in an effort to drive changes into the simulation environment that would improve its usefulness and usability. Project contributions included implementation of address translation unit, the memory hierarchy, and features dedicated to symmetric multiprocessing.

Senior Engineer/Technical Team Lead **January 1992 - August 1997**
IBM Corporation, Austin, Texas
Technical Team Lead of small hardware performance group which supported PPS, PSP and RS/6000 Divisions. For four years, conducted system-level hardware performance studies to drive product designs of future PowerPC and Power2 systems under AIX and microkernel-based operating systems. Activities included analytic modeling, trace-driven simulation and performance analysis of future system designs for commercial markets, with emphasis on memory subsystem. Fifth/last year, focused on I/O, uniprocessor and symmetric multiprocessor performance issues for OS/2 on Intel-Based systems for server market.

Member of Technical Staff **Summer 1989**
AT&T Bell Laboratories, Murray Hill
Investigated how processor idle time may be utilized to provide error detection in high performance pipelined processors. This unique concept, and its more general applicability, was invented while doing PhD Thesis research and is today known as "Multithreading."

Member of Technical Staff **Summer 1987**
AT&T Bell Laboratories, Murray Hill
Investigated how numerical algorithms are programmed on high performance machines. Implemented Linpack routines on an experimental high performance processor in the native assembly language of the processor, and measured its performance.

Member of Technical Staff **Summer 1986**
AT&T Bell Laboratories, Murray Hill
Designed and performed layout of a packet switching network for use in multiprocessor communications. Used ICON, a layout and simulation tool, for CMOS VLSI layout.

Research **Summer 1985**
NASA Langley Research Center, AIRLAB
Conducted fault-free performance validation of SIFT, an experimental multiprocessor system designed to provide extremely reliable computing service for critical functions in aircraft.

Senior Technical Associate **Summer 1984**
AT&T Bell Laboratories, Murray Hill
Used Prolog to describe and evaluate logic circuits. Implemented behavioral descriptions for both combinational and synchronous sequential circuit, and verified them for functional correctness.

Annual IEEE Workshop on Workload Characterization **1998-2004**
Program Chairs: Prof. Lizy John, Univ. of Texas at Austin, and Dr. Ann Marie Grizzaffi Maynard

Books & Publications

Numerous publication references from 1992-2007 are available upon request.

Community Focus

Puerto Rican Folkloric Dance & Cultural Center (www.prfdance.org) **September 1997 - Present**
Founding Executive and Artistic Director of one of four active cultural centers on the mainland US affiliated by the Institute of Puerto Rican Culture for our offering of authentic, high-quality cultural programming. PRFDance has created an anchor in the Southwest U.S. for Puerto Rican culture as the only cultural center in Texas and our four surrounding states, offering ongoing performance and educational programs in Puerto Rican folklore and culture. The mission of this Non-Profit (501(c)(3)) is to promote cultural awareness and pride through authentic performances and high-quality educational programs in the folkloric performing arts (dance, music, and theatre), and the historical development of the Island's customs and traditions. Programs are funded annually by the National Endowment for the Arts, the Texas Commission on the Arts, the City of Austin through the Cultural Arts Division, the Institute of Puerto Rican Culture, industry sponsors, and private donors.