Dr. Robert Castañeda

Permanent Address: 8224 Midway Depot San Antonio, TX 78255 (210) 859-3214 (Cell # day/evening) Email: robert.castaneda@utsa.edu Email: rcastane1963@yahoo.com

Education: 2000 Ph.D in Computer Science University of Texas at San Antonio Dissertation: Protocols for Mobile Ad Hoc Networking 1994 M.S. in Computer Science University of Texas at San Antonio Thesis: Evaluating Hot Spot Effects and Mutual Exclusion Algorithm Performance on Shared-Memory Multiprocessors 1990 B.S. in Computer Science University of Texas at San Antonio

Skills: Experience in industrial work as a software engineer in the field of wireless network and as an instructor at the university level. Experience with simulators, Java, C++, C, Python, Fortran, PL/I, Ada, Pthreads, Java Threads, Unix, Windows, MS-DOS, HTML, XML, SQL, Database Management, PowerPoint, Word, Excel, and Access. Excellent verbal and written skills with the adaptability to work on team or individual projects. Articulate with excellent interpersonal skills. Ability to write technical reports and convey information through presentations. Thirty years of programming experience. Knowledge of WebCT, Blackboard Vista, Canvas, and Blackboard for online teaching. Has taught online courses for over 15 years.

- **Experience:** Associated Professor in Practice at University of Texas at San Antonio August 2018 to present
 - Have taught courses IS 2033 (residential and online), IS 2043, IS 3043, IS 3433

Tenured Associate Professor at St. Philip's College August 2014 to August 2018 Tenured Assistant Professor at St. Philip's College August 2012 to August 2014 Assistant Professor at St. Philip's College, August 2009 to August 2014 Instructor at St. Philip's College, August 2006 to August 2009 Full-time Adjunct at St. Philip's College, August 2005 to August 2006

Program Director of the Computer Science program (August 2007 – August 2018)

- Coordinates and appoints all Computer Science courses to Computer Science faculty/adjunct faculty every semester
- Updates the brochure for the Computer Science program
- Advise Computer Science students: show them the Computer Science web site, gave them printouts about the degree plan, course descriptions, and book information about the Computer Science courses here at St. Philip's College
- Created/modified the Unit Plan Review for the Computer Science Program

- Developed the Computer Science curriculum to conform to the Field of Study (ACGM).
- Selected and ordered all textbooks for all Computer Science courses
- Has served on numerous hiring committees for new faculty

Program Director of Web and Mobile Developer program (August 2011 – August 2018)

- Coordinates and appoints all Web and Mobile Developer courses to faculty/adjunct faculty every semester
- Advise Web and Mobile Developer students: gave them printouts about the degree plan, course descriptions, and book information about the Web and Mobile Developer courses here at St. Philip's College
- Selected and ordered all textbooks for all Web and Mobile Developer courses
- Has served on numerous hiring committees for new faculty

Senior Lecturer/Project Director for NSF Mentors & Scholars, January 2002 – August 2005 University of Texas at San Antonio, San Antonio, Texas

- Taught various courses (programming, logic design, data communications, and computer architecture)
- Helped organize and maintain material for various courses
- Organized and managed scholarship program for undergraduate and graduate students
- Gave presentations at local high schools on the field of computer science

Software Engineer, 2000 – 2001

Symmetry Communications Systems, San Jose, California

- Developed software for wireless networks using GPRS technology
- Modified simulator for emulating movement of wireless devices
 - Responsible for maintaining the life cycle of software
- Group leader in developing software project to test overload of incoming data into a wireless device
 - Responsible for maintaining the life cycle of software
- Trouble shoot/debugged various software from other groups
- Wrote technical reports analyzing/outlining software projects
- Presented presentations at group meetings covering new software or software enhancements

Staff/Assistant Project Director for NSF Mentors and Scholars, 1997 – 2000 University of Texas at San Antonio, San Antonio, Texas

- Taught introductory courses for gifted high school students for college credit
- Organized and managed scholarship program for undergraduate and graduate students

Teaching Assistant, 1995 – 1997 University of Texas at San Antonio, San Antonio, Texas

- Teaching assistant for Data Structures and Computer Organization I
- Graded papers and presented material

Associate Researcher, 1994 – 1995

University of Texas at San Antonio, San Antonio, Texas

- Analyzed various hardware vs. software algorithms performances on sharedmemory computers
- In-depth analysis of comparison between different architectural designs of sharedmemory computers

Assistant Researcher, 1993 – 1994

University of Texas at San Antonio, San Antonio, Texas

- Researched on shared-memory computers
- Proposed algorithms to implement on shared-memory computers

Journals

"Query Localization Techniques for On-demand Routing Protocols in Ad Hoc Networks", ACM/Baltzer Wireless Networks, 2000. (with Samir R. Das and Mahesh K. Marina).

"Performance of Multipath Routing for On-Demand Protocols in Mobile Ad hoc Networks", Wireless Multicast and Routing in MONET, 2000. (with Asis Nasipuri and Samir R. Das).

"Simulation Based Performance Evaluation of Mobile, Ad hoc Network Routing Protocols", ACM/Baltzer Wireless Networks, 1999. (with Samir R. Das and Jiangtao Yan).

"Spin-Lock Synchronization on the Butterfly and KSR-1", IEEE Parallel & Distributed Technology, 1994. (with Xiaodong Zhang and Elisa W. Chen).

"Performance prediction and evaluation of parallel processing on a NUMA multiprocessor", IEEE Transactions of Software Engineering, 1991. (with Xiaodong Zhang and Xin Qin).

Conferences

"Query Localization Techniques for On-demand Routing Protocols in Ad Hoc Networks", The Fifth Annual ACM/IEEE International Conference on Mobile Computing and Networking (MOBICOM), August, 1999. (with Samir R. Das).

"Comparative Performance Evaluation of Routing Protocols for Mobile Ad Hoc Networks", Proceedings of the Seventh International Conference on Computer Communications and Networks (IC3N), October, 1998. (with Samir R. Das, Jiangtao Yan, and Rimli Sengupta).

"Latency analysis and evaluation of CC-NUMA and CC-COMA hierarchical rings", Proceedings of the 1994 International Conference on Parallel Processing, 1994. (with Xiaodong Zhang and Ying Yan).

"Modeling and measuring Hot Spots on MIN-based and HR-based Shared-Memory Architectures", Proceedings of the fifth IEEE Symposium on Parallel and Distributed Proceedings, 1993. (with Xiaodong Zhang and Ying Yan).