

June 2018

Bruce P. Tis, Ph.D.

Education

Boston University, Ph.D. Computer Engineering	1995
Dissertation - Object Based Distributed Kernels for Networks of Microcontrollers	
Northeastern University, M.S.E.E. Computer Science Option	1973
Northeastern University, B.S.E.E.	1971

Simmons College, Boston Ma. (1998-present)

College of Organizational, Computational and Information Science Computer Science Department

Associate Professor (2013 - present) (Computer Science and Informatics program moved from the College of Arts and Sciences to the School of Library and Information Sciences in 2013). A reorganization in July 2017 created a new college, the College of Organizational, Computational and Information Sciences, in which the computer science department is now located.

Director Computer Science and Informatics Program (2013-2014)

Teaching

- Designed and taught LIS531D Computer and Network Security in Libraries (Graduate)
- Designed and taught online LIS485 Introduction to Programming (Python) (Graduate)
- Designed and taught online LIS458 Database Management (Graduate)
- Teach (currently)
 - Graduate LIS458 Database Management
 - LIS485 Introduction to Programming

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Undergraduate

- CS112 Introduction to Programming
- CS113 GUI and Event Driven Programming
- CS345 Operating Systems
- CS226 Computer Organization and Architecture
- CS227 Computer Networks
- CS327 Networks Security
- CS333 Database Management

Service

- Serve on College committees such as Faculty Senate, Fiscal Affairs (chaired), Advising Task Force, Ad-Hoc Faculty Compensation Committee, PARR, SLIS Technology Advisory, Information Science and Technology Program Faculty, Computer Science and Informatics Program Faculty, Faculty Marshall, Data Science Program development

Scholarly

- Main area of interest computer networks and security
- Participate in scholarly activities such as: conference attendance, presentation and publication of papers, presentation of workshops, attendance at Industry seminars on technology, faculty colloquia

College of Arts and Sciences

Chair of the Department of Computer Science and Information Technology 2003-2010

Director of the Computer Science Program 2000-2003

Associate Professor 1998-2013 (tenured 2001)

- Teach
 - IT101 Living in a Digital Society
 - CS112 Introduction to Programming
 - CS113 GUI and Event Drive Programming
 - CS345 Operating Systems
 - CS232 Data Structures
 - CS226 Computer Organization and Architecture
 - CS227 Computer Networks
 - CS327 Networks Security
 - CS333 Database Management
 - Math101 Introduction to Mathematics

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- Serve on College committees such as Faculty Council, Admissions, Academic Technology, Fiscal Affairs
- Serve on Special Task Forces such as Academic Assessment and Planning Group, IT Steering Committee, Information Technology Fluency
- Develop computer science, information technology, health informatics curricula
- Participate in scholarly activities such as: conference attendance, presentation and publication of papers, presentation of workshops, attendance at Industry seminars on technology, faculty colloquia
- Department Chair including: scheduling courses, hiring part time and full time faculty, budgeting, faculty evaluation, curriculum development, advising, representing the program at various College events, create/update program marketing information including WEB based
- Led the establishment of an undergraduate information technology and information literacy competency requirement for undergraduates and developed an online "course" to help students meet the requirement

Boston University, Boston Ma.

Adjunct Associate Professor 1998 - present

- Teach and develop graduate level courses for the Computer Science Department Metropolitan College
- Teach:
 - Face-to-face - TC625 Business Data Communication and Networks, CS575 Operating Systems
 - Online courses – Instructor in charge of CS625 Business Data Communications and Networks (developed online course materials, ran three offerings of course – 100+ students each offering, managed 6-9 facilitators). Instructor in charge of CS200 Fundamentals of Information Technology (developed online course materials, ran twelve offerings of course – 30-60 students each offering, managed 3-5 facilitators). Taught CS690 Network Security,
 - Served as online facilitator for CS625 Business Data Communications Networks, CS520 Information Structures, CS521 Information Structures with Python, CS690 Network Security, CS695 Enterprise Security, Developed, CS200 Fundamentals of Information Technology

Full time Assistant Professor 1995-1998

Full time Instructor 1987-1995

Part-time Lecturer 1984-1987

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- Taught CS776 Distributed Operating Systems, CS535 Data Communication and Computer Networks, CS575 Operating Systems, CS335 Introduction to Computer Networking, CS301 Computer Science II, CS272 Computer Organization and Assembly Language Programming, CS221 Programming in C, CS201 Computer Science I, TC570 Computer Science Concepts for Telecommunications
- Managed Operating Systems, Computer Organization/Architecture, Systems Programming, Computer Networking curricula
- Participated in department and college committees - Academic Policy Committee, Merit Review Committee, Faculty Search Committee, Graduation Committee
- Managed full range of activities related to Department/College computing needs, to include Sun Ultra II server (Solaris), MicroVax 3100 (VMS), DecStation 5000/200 (Unix), College PC labs (50 PCs), Novell network. Activities included needs assessment, equipment evaluation, purchase and installation, equipment repair, software installation, end user support.

Wentworth Institute of Technology, Boston MA

Adjunct Professor 2015 – present

- Taught CS420 Introduction to Computer and Network Security

Northeastern University, Boston Ma (part time 1983-1984)

Lecturer

- Taught Fortran I and II programming

Dissertation

Tis, Bruce P., **Object Based Distributed Kernels for Networks of Microcontrollers**, Boston University 1995

Publications

Tis, Bruce P., **Using Packet Sniffing to Teach Networking Concepts**, The Journal of Computing Sciences in Colleges, Volume 30, Number 6 June 2015

Authored five learning modules published by Boston University for an online course – CS200

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Fundamentals of Information Technology. Each learning module consists of approximately 20 pages of text and graphics, 20 test questions, and an assignment. This work was commissioned by the Computer Science Department, Metropolitan College Boston University who holds the copyright. The work was peer reviewed, edited and published online.

Tis, Bruce, “**Data Communications**” learning module in cs200 Fundamentals of Information Technology and online course copyrighted by Boston University September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Computer Systems**” learning module in cs200 Fundamentals of Information Technology and online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Basics of Software Development using Java**” learning module in cs200 Fundamentals of Information Technology and online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Basics of Java**” learning module in cs200 Fundamentals of Information Technology and online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Programming in Java**” learning module in cs200 Fundamentals of Information Technology and online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Authored six learning modules published by Boston University for an online course – CS625 Business Data Communications. Each learning module consists of approximately 20 pages of text, 20 test questions, and an assignment. This work was commissioned by the Computer Science Department, Metropolitan College Boston University who holds the copyright. The work was peer reviewed, edited and published online.

Tis, Bruce, “**Network Applications**” learning module in cs625 Business Data Communications an online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**The Physical Layer**” learning module in cs625 Business Data Communications an online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**The Data Link Layer**” learning module in cs625 Business Data Communications an

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online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Local Area Networks**” learning module in cs625 Business Data Communications an online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Wide Area Networks**” learning module in cs625 Business Data Communications an online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Tis, Bruce, “**Backbone Networks**” learning module in cs625 Business Data Communications an online course copyrighted by Boston University, September 2010 Blackboard Learn Web Site

Developed online undergraduate information technology and information literacy competency online program (iComps) (2008) including learning goals, course content, tutorials, practice tasks, self assessments, final exam

Tis, B P. **Workstation Security--Privacy and Protection from Hackers.** In D Colton, M J Payne, N Bhatnagar, and C R Woratschek (Eds.), *The Proceedings of ISECON 2002*, v 19 (San Antonio): 322w. AITP Foundation for Information Technology Education. ISSN: 1542-7382. (non-refereed)

Tis, Bruce P., **Building An Intranet in the Laboratory**, The Journal of Computing in Small Colleges, Volume 15, Number 5 May 2000 p247-255 Proceedings of the Fifth Annual CCSC Northeastern Conference April 28-29.

Zlateva, Stoyanka; Veilleux, Nanette; Stainov, Rumen; Tis, Bruce; **Master’s in Telecommunication Curriculum: Innovative Programs for Part-Time Adults at a Traditional University** - Proceedings of the Engineering Education Unbounded: Lifelong Learning Any Time, Any Place Conference July 10-13, 1999, Santa Clara, Ca., The Westin Hotel

Tis, Bruce P., **Using Microcontroller Kernels in an Operating Systems Course**, The Journal Of Computing in Small Colleges, Volume 13, Number 5 May 1998 p85-96 Proceedings Of the Third Annual CCSC Northeastern Conference Sacred Heart University

Tis, Bruce P., **A Design Oriented Undergraduate Computer Networking Course**, The Journal Of Computing in Small Colleges, Volume 12 Number 5 May 1997 p189-197 Proceedings Of the

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Second Annual CCSC Northeastern Conference Northeastern University

Tis, Bruce P., **Network Design, Installation and Configuration Laboratory Assignments for Networking and Data Communications Laboratory Manual**, Editor Francis S. Grodzinsky, Prentice Hall Addendum published on WEB by Prentice Hall at www.prenhall.com/grodzinsky Fran (labs 1 through 4)

Presentations

The Current State of Security – Review of 2015 and What we can expect in 2016, Boston Network Users Group Monthly Meeting, April 5, 2016, Mass Bay Community College Wellesley, MA

Using Packet Sniffing to Teach Networking Concepts, The Consortium for Computing Sciences in Colleges Northeastern Conference April 2015

A Design Oriented Undergraduate Computer Networking Course, The Consortium for Computing in Small Colleges 2nd Northeastern Small College Computing Conference April 1997

Using Microcontroller Kernels in an Operating Systems Course, The Consortium for Computing in Small Colleges 3rd Northeastern Small College Computing Conference April 1998

Building An Intranet in the Laboratory, The Consortium for Computing in Small Colleges - Northeastern Region Conference, Ramapo College, Mahwah, NJ April 28-29, 2000.

Workshops Conducted

Workstation Security – Privacy and Protection from Hackers at the ISECON 2002 Conference held in San Antonio TX Oct 31- Nov 3 2002

Security from the Perspective off the Workstation User at The Consortium for Computing in Small Colleges - Northeastern Region Conference, held in Worchester, MA. April 19-20, 2002.

A Primer on Computer Security (Workshop) - 16th Annual Eastern Small College Computing Conference, University of Scranton October 27th and 28th 2000

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Computer Security Fundamentals and Applications (Workshop) - IESCON 2000 - The Association of Information Technology Professionals (Education Special Interest Group) Philadelphia Nov 9-12, 2000.

Contributions to the profession

Reviewer Consortium for Computing Sciences in Colleges — Northeastern Region
Journal of Computing Sciences in Colleges. January 2016

Boston University - hired to review/edit a 275 page course pack for CS695 Security (2008).

Wiley Publishing - hired to review/edit 5 chapters from Business Data Communications and Networking by Fitzgerald and Dennis (acknowledged as a review in book contents) 2008.

Member of the COF Teaching and Learning Conference planning committee. (2007)

Meredith College - served as an external reviewer for their computer science and computer information systems majors (2006)

Prentice Hall – edited and reviewed **Corporate Computer and Network Security** - Raymond R. Panko, Prentice Hall 2000 ISBN 0-13-038471-2 (2004)

Committees at Simmons College

Faculty Senate

Faculty Council (CAS)

Technology Strategic Planning Committee

Academic Technology Committee

Admissions Committee

Academic Business Review Committee

NEASC Accreditation sub-committee

Co-Chair of Information Science and Technology Task Force

Fiscal Affairs Committee (co-chair)

Strategic Planning Sub-Committee to investigate changing Simmons to a co-ed institution

Moodle Pilot

Arts & Sciences LLC Client Committee

Hazel Dick Lenard Search Committee

PDMYR review for David Novak

Presidential (Leadership Council)

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Ad-hoc Faculty Compensation Committee

Awards

Second Best Paper Award for □Using Microcontroller Kernels in an Operating Systems Course, The Consortium for Computing in Small Colleges 3rd Northeastern Small College Computing Conference April 1998

Professional Memberships

Association for Computer Machinery (ACM) – Special Interest Group on Computer Science Education (SIGCSE), Special Interest Group on Operating Systems (SIGOPS), Special Interest Group in Communications (SIGCOMM)

Institute for Electrical and Electronic Engineers (IEEE)

USENIX

AITP/EDSIG

Asist

Industry Experience

Digital Equipment Corporation, Bedford Ma 1978-1987

Consultant, Educational Services 1984-1987

- Taught VMS Software courses including VMS Operating System Concepts, Instruction Set and Macro, Use of advanced VMS features from Fortran, Macro and Pascal, VAX/VMS System Performance Management, Pascal
- Provided technical, educational and managerial expertise in determining solutions to highly sophisticated training requirements
- Worked with product management to identify curriculum needs for emerging technologies
- Evaluated instructor classroom performance
- Coordinated application of computers to solve training center problems including recommendation of capital equipment and software
- Served as technical resource to 60 instructors, 6 managers and a marketing group

Unit Manager Customer Training 1981-1984

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- Managed a revenue generating customer software training business and a staff of 14. Courses conducted worldwide on Decsystem-10 and Decsystem-20 mainframes and VAX supermini computers
- Forecasted, budgeted, scheduled the business and resources
- Determined course development needs and course requirements
- Conducted performance reviews, salary administration and hiring
- Managed instructor productivity (12 instructors), administered 3 mainframe computer systems, determined course material needs, controlled expenses, forecasted capital equipment

Principal Educational Specialist 1978-1981

- Taught Decsystem-10 software courses worldwide to customers and employee software engineers. Including TOPS-10 User, Assembly Language, Monitor Structures, Monitor Internals and TOPS-10 7.01 Update Seminar
- Installed and maintained system software
- Did extensive course development/maintenance
- Winner of Educational Services U.S. Area Instructor Excellence Award

The First Church of Christ, Scientist, Boston Ma 1973-1978

Group Leader Technical Services 1977-1978

- Defined, organized, and scheduled work for staff
- Provided technical support for a multiprocessor commercial Decsystem-10 installation

Software Analyst

- Selected, evaluated, maintained and installed operating systems, compilers, database and communications software, utilities and general purpose applications software
- Designed and wrote general purpose systems software
- Provided technical support including problem analysis and solution to applications analysts/programmers, management and operations
- Converted business applications systems from a RCA 6 to Decsystem-10 including file conversion, COBOL program modification, creation of jobstreams, conversion of TOTAL databases to ISAM, random or DBMS-10 files

03/2018