

I. Biographical Information

A. Name

Thomas J. Fallon

B. Department

Electrical and Computer Engineering Technology

C. Present Title

Professor

D. Date of initial appointment

Temporary Full Time, Instructor – March 1996

Tenure Track, Assistant Professor – September 1996

E. Dates of any promotions at Southern Polytechnic

Promotion to Associate Professor – August 2002

Promotion to Professor -- August 2013

F. Tenure status

Tenured

G. Discontinuities in employment

None

H. Citizenship

USA

I. Academic degrees

1. BSEE, Georgia Institute of Technology, 6/86
2. MSEE, Georgia Institute of Technology, 6/95
3. PhD, Georgia State University, 5/03

J. Prior employment

1. Senior Consultant; Innovative-e, Inc.; Atlanta, GA; 11/2008 - Present
2. Software Developer/Consultant; Gateway Networks; Atlanta, GA; 1/04-4/06
3. Software Developer/Consultant; Georgia State University; Atlanta, GA; Summer 2002
4. Adjunct Trainer/Consultant, SOLINET (SE Library Network) ; Atlanta, GA; 3/93-2005
5. Network Engineer; Georgia Institute of Technology; Atlanta, GA; 4/90-1/94
6. Network Analyst/Estimator; Atlanta Technologies, Inc.; Atlanta, GA; 3/89-4/90
7. Graduate Assistant; Georgia Institute of Technology; Atlanta, GA; 4/88-3/89
8. Electrical Engineer; Georgia Institute of Technology; Atlanta, GA; 8/86-3-88
9. Inventor/Consultant; The Gulf & Western Company; Atlanta, GA; 6/85-6/86

K. Professional registration

None

II. Teaching

A. New courses developed

1. ECET 4820 – Communications Networks and the Internet, 1999
2. ECET 4840 – Advanced Telecommunications, 1999
3. ECET 4850 – Telecommunications Project, 1999
4. ECET 6301 - Telecommunications, 2003
5. ECET 6904 - Neural Networks - Telecommunications, Spring 2011
6. ECET 3710 – Hardware Programming & Interfacing, Spring 2013
7. SYE 3803 – Fundamentals of Avionics, Spring 2015

B. Laboratory manuals, instructional materials:

1. ECET 4820 – 2000 (Communications Networks and the Internet) Wrote the original textbook for the course: *The Internet Today, Fallon, Prentice Hall, 2000*
2. ASTR 1000 – 2007 (Introduction to the Universe) Designed a semester project based on the creation of an Analemma graph; created new solar spectroscopy and luminosity laboratory experiments; coordinated fieldtrips to the Fernbank Science Center
3. ECET 6202 – 2007 (Embedded PC Systems) Developed several laboratory exercises based on the TS3300 SBC
4. ECET 3810 –2009 (C++, Java, and HTML) Upgraded lecture and lab material; developed a Java-based virtual submarine to be used as the target system for student GUI projects
5. ECET 4840 – 2009 (Advanced Telecommunications) Added lecture components on queuing theory and encryption algorithms
6. ECET 3701 – 2011 (Embedded PCs) Developed several laboratory exercises based on the TS3300 SBC; modified interfacing lecture material—added several modern examples
7. ECET 6904 – 2011 (Neural Networking) Developed all lectures, assignments, and laboratory exercises
8. ECET 3710 – 2013 (Hardware Programming & Interfacing) Developed several laboratory exercises based on the NetDuino
9. SYE 3803 – Fundamentals of Avionics, Spring 2015 – Developed all instructional material including lecture notes, exams, and homework assignments
10. SYE 3801 – Aerodynamics, Spring 2015 – Created PowerPoint version with additional annotation and graphics of all lecture notes

C. Grants

1. Developed and submitted unsuccessful NSF ILI (Instrumentation and Laboratory Improvement) proposal (#98-51674) for \$99,647 for equipment upgrades for the BSTCET laboratory in G-106 - 1997.
2. USG Board of Regents ICAPP (Intellectual Capital Assistance Partnership Program) grant for the “Proposal for a New Program: Bachelor of Science in Telecommunications Engineering Technology – 1998,” which resulted in \$470,000 of funding to purchase resources for the new BSTCET program.
3. Submitted \$7176 SPSU tech-fee proposal for 12 Cypress Microsystems PSoC development kits for use in both ECET 3701 (Embedded Systems) and ECET 4701 (Network

Programming and Interfacing). Proposal was approved by TFERT (Tech Fee Expenditure Review Team) for half the amount at \$3588 for 6 development stations – 2006.

III. Service

A. Service to the Department

1. Presented several TCET degree program status updates to the ECET IAB (Industrial Advisory Board)
2. Attended and presented demonstrations at numerous SPSU Open House sessions, 1997 – present
3. Advisor to undergraduate students in BSTCET and CpET programs
4. Organized and led TCET Faculty/Student Forum, Fall 2004
5. Organized ECET Colloquium featuring guest-lecturer Dr. Gerd Wohstenkuler, Fall 2005
6. Organized and led ECET team at SPSU Open House, Spring 2006
7. Member of ECET Department ABET Accreditation Committee, 2007 - 2008
8. Member of ECET Department Faculty Search Committee, Spring 2008
9. TCET Degree Program Coordinator -- all aspects of BSTCET degree program, 1998 – 2011
10. Chair of ECET Department Peer Committee, 2009 – 2011
11. Chair of ECET Department Faculty Search Committee, 2010 – 2011
12. Member of the faculty advisory group for the ECET AUVT (Autonomous Underwater Vehicle Team), 2011-2012
13. Participated in 2013 Preview Day; met with prospective students and their parents
14. ECET Search Committee, Chair, Summer 2013
15. ECET Peer Committee: Helped evaluate three ECET reappointment packages; wrote one of committee reappointment recommendation letters; late summer semester 2013
16. Coordinated and conducted ECET Outreach materials meeting on Friday, 9/6/2013
17. Represented ECET at First Tech Challenge on Saturday, 9/7/2013, in Q building
18. Coordinated and conducted ECET Open House planning meeting on Friday, 9/27/2013
19. Coordinated ECET efforts for Saturday, 10/12/2013 Open House
20. Represented ECET at ET&M Outreach event at Barber Middle School on Friday, 10/18/2013
21. Attended ATP TCET scholarship luncheon on Tuesday, 10/22/2013; spoke about scholarship selection process
22. Assisted in judging TCET ATP scholarships applications, 10/2013
23. Represented ECET at ET&M Outreach event at Marietta High School on Friday, 11/1/2013
24. Coordinated ECET efforts for Saturday, 11/9/2013 Open House
25. Member of ECET Department ABET Accreditation Committee, 2014
26. Attended OWG #20 and #22 meeting at KSU on Thursday, 2/6/2014 as proxy for Dr. Asgill
27. Coordinated 2/15/2014 Open House for ECET Department
28. ECET Search Committee, Chair, Spring 2014; Coordinated whole process plus six interviews
29. Attended TCET degree meeting with ATP at Experian Office in Dunwoody; 2/28/2014
30. Represented ECET at ALC (Academic Leadership Council) meeting on 8/27/2014 at 2:00 PM in Q-202
31. ECET CI (ABET Continuous Improvement) Committee member, 2013-2014

32. ECET ABET Committee member: Very active in preparations leading up to and including the ABET Visitation Team's arrival; Completed six of the ABET course binders; prepared labs Q-306 and Q-333; attended requisite meetings with the Visitation Team, including meeting with Visitation Team member Dr. Vincent on Monday, 10/27/2014 from 10:30 to 11:00 AM to answer questions regarding the TCET program
33. ECET Peer Committee member, 2014-2015
34. ECET CPE Committee member, 2014-2015

B. Service to College

1. Secretary of the School of ET&M, 2003
2. Moderator of the School of ET&M, 2004 – Spring 2006
3. Coordinator of the ET&M Student Success Day, 2010
4. Coordinator of the ET&M Student Success Expo, 2011 – students from the school of Engineering Technology and Management presented approximately 25 technological and business-related projects and presentations to several high school and 2-year colleges students
5. Represented ECET department at NCUT Chinese Summer Camp on Monday, 7/29/2013
6. Member of ET&M Outreach Committee, 2013
7. ET&M representative of the A&S School Peer Committee, 2013-2014, 2014-2015
8. ET&M Outreach visit: GA MFG Assn Expo; Gwinnett Center, Duluth, 6/13/2014
9. College of Engineering and Engineering Technology Outreach visit: Stone Mountain High School, 9/18/2014
10. College of Engineering and Engineering Technology representative at OWL Preview Day at KSU, 9/27/2014
11. College of Engineering and Engineering Technology representative at SPSU Preview Day at KSU, 10/4/2014
12. Attended KSU Online/Hybrid meeting in the J Building on Tuesday, 11/18/2014 at 11:00 AM
13. College of Engineering and Engineering Technology representative to the KSU Undergraduate Research Advisory Council (URAC), 2015-2016

C. Service to SPSU/KSU

14. Presentation of the new BSTCET degree program to the SPSU Foundation, 1998
15. Presentation of the new BSTCET degree program to the SPSU Alumni Foundation, 1998
16. Member of the Academic Computing Committee, 1998
17. Interview on GPTV program "Success Tracks" for new BSTCET degree program, 1999
18. Interview about the new BSTCET degree program with the Atlanta Journal Constitution for the Cobb Annual Report section, 1999
19. Provided Board of Regents with periodic BSTCET Status Reports, 1998-2000
20. Member of the Academic Scholarship Advisory Committee, 2000
21. Coordinated "The Internet Today" book signing at the campus bookstore, 2000
22. Member of the Executive Director of Information Technology Search Committee, 2000
23. Secretary of the Student Life Committee, 2004
24. Member of the Student Life Committee, 2003 – 2004
25. Member of the Student Status Committee, 2005 – 2007
26. Coordinator of the 2007 NASA Polar Palooza Seminar at SPSU – NASA scientists conducting climate-related research at the poles presented videos, had discussions, and showed vari-

ous props (e.g. 4000-year-old ice core); the seminar was open to the public and was well attended

27. Presenter at the 2008 SPSU Earth Day Festival
28. Member of the Student Life Committee, 2011-2012
29. Chair of the Student Life Committee, 2012-2013
30. AE Summer School: 4 Astronomy sessions, Summer 2013
31. Competition judge for PSLAMP conference on Friday, 10/11/2013
32. AE Summer Camp astronomy presentations: 6/10 and 6/24/2014
33. Attended SPSU Scholarship Award Dinner at Marietta Conference Center for TCET ATP recipients; Tuesday, 10/14/2014

D. Service to the profession

1. Member, American Society for Engineering Education, since 2006
2. ASEE/SE Annual Conference, Research Competition Judge, 2010
3. ASEE – Southeast Section, Secretary of Research Division, 2010 – 2011
4. ASEE/SE Annual Conference, Research Competition Judge, 2011
5. ASEE – Southeast Section, Vice Chairman of Research Division, 2011 – 2012
6. ASEE – Southeast Section, Chairman of Research Division, 2012 – 2013
7. ASEE – Southeast Section, Secretary of the Secretary of Publications and Promotions Unit, 2013 – 2014
8. Attended ASEE-SE Executive Board Meeting as unit level officer (Secretary of Publications and Promotions Unit) on Thursday, 10/24/2013
9. Attended ASEE-SE Annual Conference at Mercer University in Macon, GA, March 30 – April 1, 2014
10. ASEE – Southeast Section, Vice Chairman of the Publications and Promotions Unit, 2014 – 2015
11. Presented Publications and Promotions Unit candidate host site research and Zone II 2017 Annual Conference material during 2014 ASEE-SE Executive Board Meeting; 10/16 – 10/17/2014; MicroTel Inn & Suites, Atlanta, Georgia; Vice Chair of Publications and Promotions Unit

E. Service to the community

1. Presenter at Yamacraw High School Teachers Summer Program, 2000
2. Judge for astronomy competition for the Science Olympiad, May 1, 2003
3. Teacher of Children's Church at Heritage Presbyterian Church, 1999-2002
4. Chairperson of Heritage Presbyterian Church Personnel Committee, 2003-2004
5. Chairperson of Sixes Presbyterian Church Youth Director Search Committee, April – December 2005
6. Teacher of Children's Church at Sixes Road Presbyterian Church, Fall 2004 – Spring 2006
7. Presentation on Global Warming at NCCC, October 2008
8. Presentation for Math Professional Day at The Walker School, April 2009

IV. Professional Growth and Development

A. Degrees earned, short courses attended, degree and non-degree courses taken

1. USG Faculty Development Workshop “Connecting Teachers and Technology” Initiative, Academic Services and Distance Learning, O.I.I.T, Athens, GA, 1997
2. Office of Program and Funding (OPF) Grant Writing Workshop, Washington, D.C., 1998
3. Red Hat Linux Networking & Security, Global Knowledge, Inc. June 2000
4. Java and XML Application Development: Learning Tree International, July 2001
5. Oracle 8i: A Comprehensive Hands-on Introduction, Learning Tree International, July 2001
6. ABET Annual Meeting, National Conference on Outcomes Assessment for Program Improvement, Pittsburgh, PA, October 2002
7. 2002 NASA Michelson Interferometry Summer School, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, June 2002
8. Ph.D. from GSU, 2003, Dissertation: The Remote Operation of the CHARA Array via the Internet
9. SPSU TCET Faculty/Student Forum with network security seminar featuring guest-speaker Kevin Beaver, Fall 2004
10. ECET Colloquium on German exchange program featuring guest-lecturer Dr. Gerd Wohstenskuler, Fall 2005
11. 2007 NASA Polar Palooza Seminar at SPSU
12. Microsoft Certified Application Developer (MCAD), 2007
13. Microsoft Certified Technical Specialist (MCTS): SharePoint Development, 2009
14. Copyright seminar conducted by Becky Rutherford in CTE, 2009
15. PeopleAdmin seminar presented by Quint Hill, 2011
16. Degree Works seminar presented in CTE, 2011
17. D2L Boot Camp: Part 2, 10/4/2012
18. 2013 Advising Updates course, 5/6/2013
19. Attended DegreeWorks training in the CTE on Tuesday, 9/10/2013
20. Copyright in the Classroom seminar conducted by Alana Kyriakakis in Q-202, 10/1/2013
21. Completed the Ethics Refresher Training, March, 2014
22. Attended 2014 ASEE-SE Annual Conference Technical Session T3-E: 4 presentations presented by the Instructional Division
23. Attended 2014 ASEE-SE Annual Conference Technical Session T4-B: 4 presentations presented by the Mechanical Engineering Division
24. Attended ECET departmental training session for Blackboard with Travis Melton on Tuesday, 10/7/2014 at 1:30 PM in H-202
25. Completed the Online Teaching Provisional Certificate Workshop offered by KSU on 12/23/2015

V. Academic Achievement

1. Conference speaker for the Florida Public Libraries Director's Conference, 1996
2. Conference speaker for the Georgia Online Library Database Annual Membership Conference, 1996
3. Seminar presenter (“Remote Operation of the CHARA Array via Internet2”) for Georgia State University Physics/Astronomy Department, 1999
4. Author: The Internet Today, Prentice Hall, 2000, ISBN: 0-13-010139-7
5. Conference speaker for the State of Florida Annual Library Conference, 2000

6. Co-author: "Detection of the faint companion in the massive binary HD 199579," *Astrophysical Journal*, 548:425-428, February, 2001
7. Co-author: "Choosing A Telecommunications Curriculum for Electrical Engineering Technology," Proceedings of the ASEE 2001 Annual Conference, Charleston, SC, March 31-April 3, 2001
8. Co-author: "A Comprehensive Telecommunications Degree for Engineering Technology," Proceedings of the ASEE Annual Conference, Albuquerque, New Mexico, June 24-27, 2001, Session 2648.
9. Author: "Remote Operation of the CHARA Array via the Internet," Proceedings of the 2002 Annual SPIE Conference, Session 4838, August, 2002
10. Co-author: "Developing a Capstone Course for Telecommunications Engineering Technology", Proceedings of the 2006 ASEE Annual Conference & Exposition, June 2006
11. Author/Presenter: "Innovative Curriculum Modifications for a Telecommunications Engineering Technology Degree Program," presented at the 2007 ASEE, CIEC Annual Conference EDT Session, Palm Springs, CA, February 2007
12. Co-author: "Development of Undergraduate Network Security Labs with Open Source Tools", Proceedings of the 2009 ASEE Annual Conference and Exposition, Austin, Texas, June 2009
13. Co-author: "On the Use of Virtualization for Router Network Simulation", Proceedings of the 2010 ASEE Annual Conference and Exposition, Louisville, Kentucky, June 2010
14. Paper Presentation at 2013 ASEE Annual Conference, 6/24/2013
15. Author: "Survey of Technologies and Techniques used to Conduct Laboratory Exercises for Distance Learning Courses", ASEE 2013 Annual Conference Proceedings, Atlanta, Georgia, 6/24/2013
16. Co-author: "Modeling Multi-Protocol Label Switching Networks in the Laboratory", final draft uploaded to ASEE; waiting on final approval; 2015 ASEE Annual Conference, Seattle, Washington, June 14-17, 2015