

<p>Engineering Technology: Electrical and Computer Engineering Technology Faculty Resumes</p>

Christopher J. Smith
Associate Professor of ECET
ECET Program Coordinator

Degrees with fields, institution, and date:

- Two years graduate study toward PhD at Purdue and Notre Dame, 1980-1982
- MS Electrical Engineering, Univ of Notre Dame, 1983
- BS Electrical Engineering, Univ of Notre Dame, 1979
- BA Liberal Arts, Univ of Notre Dame, 1979

Years of service on this faculty, date of appointment, dates of advancement in rank:

- 25 years (Hire date: March 1984).
- Assistant Professor of ECET, 1984 - 1991.
- Associate Professor of ECET, 1991 - Present.

Other teaching experience:

- Computer Programming Instructor and Dean of Students, Michiana College, South Bend IN, 1982-1984.
- Associate Professor of Electrical Engineering, Universiti Teknologi Malaysia, Batu Pahat, Johor, Malaysia, 1995-1996.

Industrial experience and consulting work:

- Design engineer, LML Automated Systems, Burns Harbor IN. Summer 2002
- Embedded microcontroller design engineer and programmer, Sullair Corp, Michigan City IN, 2000 - 2001
- Design engineer, SSD Inc., South Bend IN, Summer 1998
- Design engineer, Strilich Technologies, Merrillville IN, Summer 1999
- Electronic repair technician, Penny Saver Publishing, South Bend IN, 1974-1978

Patents: None.

States in which professionally licensed or certified, if applicable: N/A.

Principal publications of the last five years: None.

Scientific and professional societies of which a member:

- Senior Member of IEEE (elected in 2004).
- ASEE (American Society of Engineering Education).

Honors and awards: Outstanding Teacher Award, PNC, 1992.

Institutional & professional service in the last five years: Several faculty committees.

Professional development activities in the last five years:

- ABET program evaluator for over 20 years, 1989 - Present.

Grants received:

- Purdue Research Foundation International Travel Grant to travel to China, 1989.
- \$42,000 from National Science Foundation (NSF) to purchase Hewlett-Packard automated testing equipment and Lab-View software for analog lab (Room T-083), 1995
- \$31,000 from Kankakee Valley Job Training Programs (KVJTP) to teach seven-week computer assembly and career readiness course for 18 at-risk 14- and 15-year-olds, 1997
- \$2000 matching grant from recent graduate and his employer to purchase \$4000-worth of PLC equipment for EET labs, 1997

Percentage of time available for research, scholarly or professional development: 5%.

Percent of time commitment to the program: 100%.

Li-Zhe Tan, PhD
Assistant Professor of ECET

Degrees with fields, institution, and date:

- Ph.D. Electrical Engineering, University of New Mexico, 1992
- M.S. Electrical Engineering, University of New Mexico, 1989
- M.S. C.E, Structural Engineering, University of New Mexico, 1987
- B.S. C.E, Nanjing Institute of Technology (Southeast University, now), 1984

Years of service on this faculty, date of appointment, dates of advancement in rank:

- 1 year (Hire date: August 2008)
- Assistant Professor of ECET 2008 - Present

Other teaching experience:

- Senior Professor, Co-curriculum coordinator for ECET Program, DeVry University, Atlanta, Georgia, 2002-2008
- Professor, Chair of communications and signal processing sequence, DeVry University, Atlanta, Georgia, 1999-2002
- Associate Professor, IEEE Atlanta Student Chapter Counselor (DeVry University, Atlanta, Georgia, 1997-1999.
- Research Associate, Department of Electrical and Computer Engineering, University of New Mexico, 1992-1993

- Teaching/Research Assistant, Department of Electrical and Computer Engineering, University of New Mexico, 1987-1992

Industrial experience:

- Principal Research Engineer, Iterated Systems, Atlanta, Georgia, 1994-1997
- Senior Software/Research Engineer, American Laser Games, Inc., Albuquerque, New Mexico, 1993-1994
- Research Associate, Sandia National Laboratory and Department of Electrical and Computer Engineering, University of New Mexico, 1992-1993

Consulting Work:

- SGI Testing Services, Atlanta, Georgia: Applications of digital signal processing techniques and wireless sensor networks for Geotechnical Engineering.
- Collaboration with faculty in Department of Transportation Engineering at Texas A&M University (College Station, TX): research on intelligent transportation systems.

Patents:

S. Johnson, J. Wu, and L. Tan, System and Method for Modeling Discrete Data Sequences. U.S. patent No. 5,721,543.

States in which professionally licensed or certified, if applicable: N/A.

Principal publications of the last five years:

- L. Tan, Digital Signal Processing: Fundamentals and Applications. Elsevier/Academic Press, 2007, ISBN 978-0-12-374090-9
- L. Tan, Jean Jiang, Fundamentals of Analog and Digital Signal Processing. Second Edition, AuthorHouse, 2008, ISBN 978-1-4343-5641-3
- L. Tan, Jean Jiang, Analog and Digital Signal Processing. Linus Publications, 2009.
- L. Tan and J. Jiang, "Novel Adaptive IIR Notch Filter for Frequency Estimation and Tracking," accepted, IEEE Signal Processing Magazine, November 2009.
- L. Tan and J. Jiang, "Active Noise Control Using Filtered-X RLS Algorithm with Sequential Updates," Journal of Communication and Computer, Vol. 6, No. 5, pp. 9-14, May 2009.
- L. Tan and J. Jiang, "Real-Time Frequency Tracking Using Novel Adaptive Harmonic IIR Notch Filter," the Interface Technology Journal, Vol. 9, No. 2, Spring 2009.
- L. Tan and J. Jiang, "A Bi-level Block Coding Technique for Encoding Data Sequences with Sparse Distributions," the Interface Technology Journal (selected from IAJC-IJME International Conference), Vol. 9, No. 1, Fall 2008.
- L. Tan and J. Jiang, "A Simple DSP Project for Teaching Real-time Signal Rate Conversions," the Interface Technology Journal, Vol. 9, No. 1, Fall 2008.

Scientific and professional societies of which a member:

- Senior Member of IEEE (elected in 2001).
- ASEE (American Society of Engineering Education).

Honors and awards:

- Special award for Guidance and Support of Biomedical Engineering Technology (BMET) senior projects (2005-2006), DeVry University, Atlanta Campus.

- Listed in Who is Who in America, 2001, Who is Who in the world, 2002, Who is Who in Science and Engineering 2003.

Institutional & professional service in the last five years: Several faculty committees.

Professional development activities in the last five years:

- L. Tan and J. Jiang, "Adaptive Second-Order Volterra Filtered-x RLS Algorithms with Sequential and Partial Updates for Nonlinear Active Noise Control," IEEE International Conference on Industrial Electronics and Applications, pp. 1625-1630, May 2009.
- L. Tan and J. Jiang, "Teaching Advanced Digital Signal Processing with Multimedia Applications in Engineering Technology Programs," ASEE Annual Conference, June 2009.
- L. Tan and J. Jiang, "A Bi-level Block Coding Technique for Encoding Data Sequences with Sparse Distributions," presented in IAJC-IJME (International Association of Journal Conference; International Journal of Modern Engineering) International Conference in November 2008.

Percentage of time available for research, scholarly or professional development: 20%.

Percent of time commitment to the program: 100%.