LEONG LEE

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EDUCATION

Ph.D. Computer Science, University of Missouri (Missouri University of Science and Technology) **July 2010**
M.S. Computer Science, University of Missouri (Missouri University of Science and Technology) **Dec 2007**
M.S. Information Management, with Honours, National University of Ireland, Dublin **July 2000**
B.S. Computer and Information Sciences, National University of Singapore **Aug 1996**

ADMINISTRATIVE & LEADERSHIP POSITIONS

Austin Peay State University, Clarksville, Tennessee, USA **Aug 2018 - Present**
Department Chair, Computer Science & IT

– Responsibilities include providing strategic and operational leadership for the Department of Computer Science & IT, in terms of academic matters, accreditation, enrollment, graduation, marketing, social media, information technology, faculty & student research, online teaching and learning, undergraduate & graduate student matters, advisement, industrial advisory board, and liaison with other APSU departments & industrial partners.
– Responsible for the Department of Computer Science & IT at APSU, which is one of the largest computer science departments in the state of Tennessee, in terms of student number. The department has over 600 undergraduate and graduate students, 13 full-time faculty, 3 staff members, 17 adjunct faculty, around 30 student workers, 3 B.S. programs (6 concentrations), 6 minors, 1 M.S. program (4 concentration), 1 PSM program (5 concentrations), and 2 graduate certificates.
– Hired 5 full-time faculty, 2 staff members, many adjunct faculty and many student workers.
– Achieved / obtained ABET accreditation for all B.S. programs (B.S. Computer Information Systems, B.S. Computer Information Technology, B.S. Computer Science) during the COVID years (2020-2022). Managed SACSCOC accreditation for M.S. / PSM programs. Maintained ABET and SACSCOC accreditations.
– Made important organizational changes to the department due to accreditation and department expansion.
– Coordinated curriculum development and review, improved the department's online teaching methods.
– Coordinated & managed building matters for the Maynard Math & Computer Science Building.
– Responsible for COVID-19 responses from 2020 to 2022, in terms of faculty & student safety, course delivery planning, information technology improvement, and emergency responses.
– Responsible for academic personal matters, including tenure, promotion, hiring, evaluation, professional development, and discipline for faculty, staff and students.
– Steadily increased the department's number of referred research papers, and the number of grants awarded to the department. Obtained different type of grants from organizations such as Microsoft, TBR, and Google etc.
– Involved in the development of the university strategic plan, COVID-19 financial planning, and the consultancy of many university-level IT enterprise systems.
– Created social media presence for the department, and pushed daily marketing materials to Facebook, Instagram, and Twitter, with over 1 million yearly impressions since 2020.
– Managed a diverse student population (on-line, transfer, military-affiliated and second-degree students).
– Started and responsible for the daily operations of the community outreach program GOOGLE sponsored APSU Coding Camps, 2018 to present. Conducted APSU Junior Coders weekend classes to 3rd through 12th grade students during Spring and Fall semesters. Organized APSU Coding Camps (week-long half day / day camps) to 3rd through 12th grade students during Summer semester. Sponsored and subsidized by GOOGLE.

ACADEMIC POSITIONS & EMPLOYMENTS

Austin Peay State University, Clarksville, Tennessee, USA **Aug 2011 - Present**
Professor, Computer Science & IT
– Conducted research, performed faculty duties, developed and taught courses

University of North Carolina at Greensboro, Greensboro, North Carolina, USA **Aug 2010 – July 2011**
Visiting Assistant Professor, Computer Science
– Conducted research, performed faculty duties, developed and taught courses

Missouri University of Science and Technology, Rolla, Missouri, USA **Jan 2007 - July 2010**
Graduate Research Assistant

- Involved in NSF-funded research, developed software, supervised students, taught classes

Temasek Polytechnic, Singapore   **May 1998 - Sept 2005**
Lecturer / Course Coordinator
- Developed and taught courses, managed external projects, supervised lecturers and students

Shell Eastern Petroleum, Pulau Bukom, Singapore   **Sept 1996 - May 1998**
System Engineer
- Web Master, System Administrator

SERVICE ACTIVITIES

University Service, Austin Peay State University (APSU)
- 2017-Present: Organizer - APSU Junior Coders classes, APSU Coding Camps
- 2018-Present: Building Coordinator - Maynard Math & Computer Science Building
- 2021-Present: Member - APSU RTP (Retention, Tenure, Promotion) Policy Committee
- 2022: Chair - APSU Department of Computer Science & IT, Academic Assistant to Chair, Search Committee
- 2022-23: Member - APSU College of STEM, Communication Director Search Committee
- 2022-23: Member - APSU Department of Computer Science & IT, Department RTP (Retention, Tenure & Promotion) Criteria Revision Committee
- 2020-21: Member - APSU Financial Planning Taskforce
    - o The Taskforce was charged with collecting, analyzing, and recommending to the Senior Leadership Team opportunities to enhance university revenues, increase administrative efficiencies, and reduce expenses, where appropriate, to offset declining enrollments and state support due to the impacts of COVID-19.
- 2020-21: Chair - APSU Department of Computer Science, New Faculty Search Committee
- 2020-21: Member - APSU Learning Management Systems Proposal Review Selection Team
- 2020: Member - EduNav Software Evaluation Committee
    - o Software evaluation trip to UCR and RCCD, Riverside, CA.
- 2020: Internal Consultant – APSU DegreeWorks Software Implementation and Maintenance issues.
- 2020-22: COVID-19 Pandemic Response as Department Chair
    - o In February 2020, I started to prepare the CSIT Department for the coming Pandemic by distributing software (Camtasia, Zoom) to faculty, and mentally prepare faculty to switch to 100% online teaching.
    - o In Summer 2020, I formed CSIT Preparedness Committee to suggest procedures for Fall 2020 teaching. Many of these procedures were adopted by the College of STEM and APSU.
    - o In Spring 2020, we volunteered to share CSIT Department's online video making experiences with all APSU Faculty, to prepare for 100% online teaching. We made a series of videos to introduce 1. Zoom Video Making; 2. Camtasia Video Making; 3. Multiple Cameras techniques to all APSU Faculty. We also organized Zoom meetings to share our experiences. APSU Distance Education shared our videos.
    - o CSIT department purchased extra PPE for faculty and TAs, from 2020 to 2021.
    - o In Summer 2020, tables/chairs were moved in all classrooms/labs to follow the "6-feet" social distancing standard.
    - o Plexiglass screens were installed in all CSIT full-time faculty's offices.
    - o Extra signs were put in Maynard Building.
    - o The CSIT department implemented Zoom or MS Teams office hours, after March 2020 (Pandemic).
    - o The CSIT department moved student advising events to online (through Zoom, MS Teams or Email) every semester.
    - o All CSIT students were added to MS Teams "apsu-csit" group, as a result, they can chat each other or faculty, when needed. This list is updated every semester.
    - o Class delivery methods were adjusted throughout the Pandemic, following CDC policy changes.
- 2019: Chair - APSU Department of Computer Science & IT, Academic Assistant to Chair, Search Committee
- 2018-19: Chair - APSU Department of Computer Science, New Faculty Search Committee
- 2014-18: Coordinator - APSU Department of Computer Science, Internship Coordinator
- 2017-18: Member - APSU Department of Computer Science, New Faculty Search Committee
- 2016-17: Member - APSU Department of Computer Science, New Faculty Search Committee
- 2015-16: Member - APSU Web Content Management System Selection Team, and Design Team
- 2015-16: Member - APSU Department of Computer Science, New Faculty Search Committee

- 2015-16: Chair - APSU Department of Computer Science & IT, Department RTP (Retention, Tenure & Promotion) Criteria Revision Committee
- 2014-15: Member - APSU Department of Computer Science, New Faculty Search Committee
- 2013: Chair - APSU Department of Computer Science, New Faculty Search Committee (Summer Search)
- 2011-12: Member - APSU Department of Computer Science, New Faculty Search Committee

University Service, University of North Carolina at Greensboro (UNCG)
- 2010-11: Member – UNCG Department of Computer Science, Undergraduate Committee

Community Service & Engagement, Clarksville, TN
- 2017-Present: GOOGLE Sponsored APSU Coding Camps
  - 2022: Google Data Center Grant ($48,000)
    - Fall 2022: to be planned
    - Summer 2022: 10 half-day camps, 6th-12th grade students, registering
    - Spring 2022: 9 weekend coding class series, 3rd-12th grade students: 173
  - 2021: Google Data Center Grant ($40,000) - **350 total students** (3th-12th grade)
    - Fall 2021: 6 weekend coding class series, 3rd-8th grade students: 129
    - Summer 2021: 10 half-day camps, 6th-12th grade students: 221
    - Spring 2021: COVID, no classes
    - The 2021 camps were diverse
      - 41% Caucasian-American/White, 5% preferred not to respond, 54% other ethnicities
      - 31% female, 68% male, and 1% non-binary
  - 2020: COVID Pandemic
    - Summer / Spring 2020 – All camps / classes cancelled (refund)
  - 2019: Self-Funded Paid Camps - **439 total students** (K-12th grade)
    - Fall 2019: 10 weekend coding class series, K-12th grade students: 49
    - Summer 2019: 7 day camps & half-day Camps, K-12th grade students: 140
      - 60% Caucasian-American/White, 5% preferred not to respond, 35% other ethnicities
      - 26% female, 74% male
    - Spring 2019: 9 weekend coding class series, K-12th grade students: 61
  - 2017-2018: $40,000 Google Grant - **167 total students** (high school)
    - Summer 2018: 5 summer day camps, high school students: 130
      - 57% Caucasian-American/White, 13% preferred not to respond, 30% other ethnicities
      - 20% female, 80% male
    - Summer 2017: 2 summer day camps, high school students: 37
- 2017-2022: Advisor - IT / Technology Advisory Committee, First Presbyterian Church, Clarksville, Tennessee
  - Manage, direct church IT strategies and services, including IT infrastructure, software applications, church website, and social media.
- 2012-18: Member - Career and Technical Education Advisory Committee, Clarksville-Montgomery County School System, Tennessee
- 2012-18: Computer Information Technology Academy Advisory Committee at Northeast High School, Clarksville-Montgomery County School System, TN
- 2013: Co-organizer - Tennessee Middle School Mathematics Contest at APSU

Community Service & Engagement, Rolla, MO
- 2009-10: President - Common Call Campus Ministry (Episcopal, Presbyterian and Lutheran), Missouri University of Science and Technology

Community Service & Engagement, Singapore
- 2002-03: Advisor & Supervisor - Supervised students to build the Singapore President's Challenge (Charity Campaign) 2003 and 2002 websites

Professional Service
- 2018-Present: Member - Volunteer State Community College (Business & Technology Division) Advisory Board, Tennessee
- 2020: Manuscript Reviewer - Elsevier, 2020, Journal: Geomorphology (One Paper)
- 2017: Book Revision Reviewer - Jones & Bartlett Learning (One C++ Textbook)
- 2016: Session Chair - System Design Session, IEEE CIT 2016, 16th IEEE Int. Conf. on Computer and Information Technology, Yanuca Island, Fiji, Dec 7-10, 2016

- 2015: Manuscript Reviewer - 2015 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology, Niagara Falls, Canada (Five Papers)
- 2015: Student Paper Judge - Undergraduate 4-year Presentations session, ACM Mid-Southeast Conference, Gatlinburg, Tennessee, USA, Nov 12-13, 2015
- 2014: Book Proposal Reviewer: Jones & Bartlett Learning, June 2014 (One Database Textbook)
- 2014: Manuscript Reviewer: 2014 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology, Honolulu, Hawaii, USA (Two Papers)
- 2013: Session Chair (Doctoral Degree Presentations session), Student Paper Judge (Doctoral Degree Presentations session, Undergraduate 4-year Presentations session) - ACM Mid-Southeast Conference, Gatlinburg, Tennessee, USA, Nov 14-15, 2013
- 2013: Manuscript Reviewer - Elsevier, 2013, Journal: Computers in Biology and Medicine (One Paper)
- 2012: Book Reviewer - Pearson Education, July 2012, Comprehensive Chapter-level Review (One JavaScript Programming Textbook)
- 2012: Book Reviewer - Pearson Education, April 2012, Pre-revision Review (One Visual Basic Programming Textbook)
- 2011: Manuscript Reviewer - Journal of the Tennessee Academy of Science, 2011 (One Paper)
- 2011: Grant Reviewer - The MOE Translational R&D and Innovation Fund (TIF), Singapore, 2011 (One Grant Proposal)
- 2010, Grant Reviewer - National Science Foundation, Award Proposal Review (One Funding Award Proposal)
- 2009, Manuscript Reviewer - IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, 2009 (One Paper)
- 2007-08: Co-organizer - Annual Amphibian Anatomical Ontology Workshop / Conference, St. Louis, MO
- 2004: Judge - World Skills Singapore Competition 2004, Web Design Trade, Judge
- 2003: Trainer - 37th World Skills Competition 2003, St. Gallen, Switzerland, IT-Software Applications Trade, Singapore Team Chief Trainer, student won silver medal

SKILLS

Programming Experience: MS ASP.NET, C#, PHP, MATLAB, Perl, Python, C, C++, Visual Basic, Java, JavaScript, Ajax, Pascal, Flash ActionScript, Director Lingo, Linux Shell Script, HTML/CSS, SMIL, XML. **Database:** MySQL, Microsoft SQL, PostgreSQL. **Server Administration:** Microsoft Windows Server, Microsoft IIS Web Server, Apache Web Server. **Web & Multimedia:** Adobe Dreamweaver, Photoshop, Lightroom, Premiere. **Other Applications:** Microsoft Visual Studio, Microsoft Office, NetBeans. **Foreign Language:** Chinese (Mandarin and Cantonese).

PROFESSIONAL MEMBERSHIP & CERTIFICATION

IEEE Membership, 2010 - Present
Teaching in Higher Education Certification, The Staff and Educational Development Association, United Kingdom, Dec 2000

PUBLICATIONS & SCHOLARLY ACTIVITIES

Research Experience & Skills Highlights
- Data mining and algorithm with respect to hydraulic geometry, spatial accuracy and precision, second order differential equation
- Protein secondary structure prediction, neural networks, association rule visualization
- Data mining with respect to bioinformatics, machine learning algorithms, analysis of large data sets
- Web application development for bioinformatics, ontology development, relational database design
- Proficient in programming (NET, C#, PHP, C/C++, Java, JavaScript, VB, Perl, MatLab, Python etc)
- 6 years of experience in collaborating with interdisciplinary scientists to develop R&D software tools
- 9 years of experience in planning and coordinating complex system development projects

Publications, Peer Reviewed
[1] S. A. Markov, J. C. Church, **L. Lee**, C. M. Bell, S. D. Binkley, K. M. Bouma, K. M. Hutson, G. S. Markov, E. C. Mason, G. B. Rueff, T. O. Sennuga, M. H. Simpson, R. J. Zimmer, D. G. Villalpando, "**Complete Genome Sequences of Microbacterium Bacteriophages Danno, Otwor, and Scumberland, Isolated in Clarksville, Tennessee,**" *Microbiology Resource Announcements*, vol. 10, no. 13, 2021, DOI: 10.1128/MRA.00209-21.

[2] K. R. Anders, D. J. Asai, M. A. Barmoy, T. C. Bates, W. H. Biederman, D. P. Breakwell, S. K. Bullock, K. A. Butela, K. Chan, S. Chaudhary, P. Chien, J. C. Church, K. B. Clifton, A. E. Crane, S. G. Cresawn, C. Davila-Aguer, N. L. Elwess, C. J. Gallagher, A. GarciaCostas, R. A. Garlena, B. P. Gibb, A. M. Gleichsner, J. A. Grasis, S. B. Gusky, D. M. Heller, S. G. Heninger, J. R. Holloway, D. Jacobs-Sera, G. S. Joshi, M. L. Kanther, J. M. Labonte, C. A. Landry, M. Lavallee-Adam, **L. Lee**, K. S. MacLea, M. Mahmoudian-Geller, S. A. Markov, J. A. Maughan, S. D. Molloy, H. A. Nance, T. M. Ndolo, S. P. Pfeifer, R. W. Phillis, W. H. Pope, F. J. Rivera-Figueroa, J. M. Rocheleau, A. D. Rudner, D. A. Russell, V. Sivanathan, K. D. Starkey, C. N. Sunnen, T. S. Sweet, C. M. Teschke, A. Vazquez-Montes, J. R. Walker, G. J. White, D. C. Williams, E. M. Wisner, and G. F. Hatfull, "**Mycobacterium phage BodEinwohner17, complete genome**," Accession No. MN945900, Bethesda (MD): National Library of Medicine (US), National Center for Biotechnology Information; 2020. Available from: https://www.ncbi.nlm.nih.gov/nuccore/MN945900.

[3] L. Lee, M. Lees, and G. S. Ridenour, "**Multi-Interval Data Mining of At-A-Station Hydraulic Geometry to Quantify Temporal Stability**," *Proc. IEEE IEMCON 2019, 10th IEEE Annual Information Technology, Electronics & Mobile Communication Conf.*, ISBN: 978-1-7281-2530-5, Vancouver, British Columbia, Canada, Oct 17-19, 2019.

[4] N. A. Coleman, L. Lee, and G. S. Ridenour, "**Stochastic Modeling Of Hydraulic Geometry Using An Extremal Hypothesis**," *Proc. CMCGS 2018, 7th Annual Int. Conf. on Computational Mathematics, Computational Geometry & Statistics*, ISSN 2251-1911, Singapore, Apr 9-10, 2018.

[5] L. Lee, M. Jones, G. S. Ridenour, S. J. Bennett, A. C. Majors, B. L. Melito, and M. J. Wilson, "**Comparison of Accuracy and Precision of GPS-Enabled Mobile Devices**," *Proc. IEEE CIT 2016, 16th IEEE Int. Conf. on Computer and Information Technology*, Yanuca Island, Fiji, Dec 7-10, 2016.

[6] S. N. Jator, and L. Lee, "**Implementing a seventh-order linear multistep method in a predictor-corrector mode or block mode: which is more efficient for the general second order initial value problem**," *SpringerPlus*, vol. 3, article 447, 2014.

[7] L. Lee, and G. S. Ridenour, "**Using Data Mining to Investigate Interaction between Channel Characteristics and Hydraulic Geometry Channel Types**," *Proc. 2014 IEEE Symp. Series on Computational Intelligence*, Orlando, Florida, USA, Dec 9-12, 2014, pp. 479-488.

[8] L. Lee, M. Jones, G. S. Ridenour, M. P. Testa, and M. J. Wilson, "**Investigating and Comparing Spatial Accuracy and Precision of GPS-Enabled Devices in Middle Tennessee**," *Proc. Geo-Informatics in Resource Management and Sustainable Ecosystem 2014*, Ypsilanti, Michigan, USA, Oct 3-5, 2014, pp. 215-224.

[9] L. Lee, J. L. Leopold, and R. L. Frank, "**Protein Secondary Structure Prediction Using BLAST and Exhaustive RT-RICO, the Search for Optimal Segment Length and Threshold**," *Proc. 2012 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology*, San Diego, California, USA, May 9-12, 2012, pp. 35-42.

[10] L. Lee, J. L. Leopold, and R. L. Frank, "**Exhaustive RT-RICO Algorithm for Mining Association Rules in Protein Secondary Structure Sequence Data**," *Proc. 2012 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology*, San Diego, California, USA, May 9-12, 2012, pp. 260-266.

[11] L. Lee, J. L. Leopold, and R. L. Frank, "**Protein Secondary Structure Prediction Using BLAST and Relaxed Threshold Rule Induction from Coverings**," *Proc. 2011 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology*, Paris, France, Apr 11-15, 2011.

[12] L. Lee, J. L. Leopold, P. G. Edgett, and R. L. Frank, "**Rule Visualization of Protein Motif Sequence Data for Secondary Structure Prediction**," Computational Intelligence in Architecting Engineering Systems, vol. 20, *Proc. Artificial Neural Networks in Engineering Conf. (ANNIE 2010)*, St. Louis, MO, USA, Nov 1-3, 2010, pp. 333-345.

[13] L. Lee, J. L. Leopold, C. Kandoth, and R. L. Frank, "**Protein Secondary Structure Prediction Using RT-RICO: a Rule-Based Approach**," *Open Bioinformatics J.*, vol. 4, pp. 17-30, 2010.

[14] P. G. Edgett, L. Lee, J. L. Leopold, and A. B. Coalter, "**Representation and Validation of Domain and Range Restrictions in a Relational Database Driven Ontology Maintenance System**," *ACM ICPS, IDEAS '10 Proc. 14th Int. Database Engineering and Applications Symp.*, Montreal, QC, Canada, Aug 16-18, 2010, pp. 98-104.

[15] L. Lee, C. Kandoth, J. L. Leopold, and R. L. Frank, "**Protein Secondary Structure Prediction Using Parallelized Rule Induction from Coverings**," *Int. J. Medicine and Medical Sciences*, vol. 1, no. 2, pp. 99-105, 2010.

[16] L. Lee, J. Leopold, J. Albath, and A. Coalter, "**An Ontology Abstract Machine**," *Proc. 2009 Int. Conf. on Ontological and Semantic Engineering*, Rome, Italy, Apr 28-30, 2009, pp. 494-505.

[17] J. Leopold, A. Coalter, and L. Lee, "**A Generic, Functionally Comprehensive Approach to Maintaining an Ontology as a Relational Database**," *Proc. 2009 Int. Conf. on Ontological and Semantic Engineering*, Rome, Italy, Apr 28-30, 2009, pp. 369-379.

[18] L. Lee, J. L. Leopold, R. L. Frank, and A. M. Maglia, "**Protein Secondary Structure Prediction Using Rule Induction from Coverings**," *Proc. 2009 IEEE Symp. on Computational Intelligence in Bioinformatics and Computational Biology*, Nashville, TN, USA, Mar 30 - Apr 2, 2009, pp. 79-86.

Research Projects

- Jan 2012 - Present: **Data Mining for Hydraulic Geometry and Related Channel Characteristics**
  - Utilized data mining to establish a large database of hydraulic geometry and stream characteristics
  - Predicted hydraulic geometry to enable modeling sources of pollution where data is not available
- Jan 2018 - Present: **TAS - Teaching Allocation System**
  - Utilized relational database design principles to build a web application to allocate teaching resources
- Jan 2013 - Dec 2015: **Second Order Initial Value Problem**
  - Software development for a new improved mathematical approach to solve the "Second Order Initial Value Problem"
- Jan 2013 – Dec 2017: **Spatial Accuracy and Precision**
  - Defining, calculating and comparing Spatial Accuracy and Precision of GPS-Enabled Devices
- Aug 2006 - Aug 2014: **A New Protein Secondary Structure Prediction Algorithm**
  - Developed a new protein secondary structure prediction algorithm using a data mining approach
  - Achieved a Q_3 accuracy score close to 90%, 10% higher than previously developed methods
- May 2007 - July 2011: **Amphibian Anatomical Ontology - www.amphibanat.org**
  - Theoretical ontology model, web/database server admin., web design, web application development
  - NSF-funded project to constructing semi-automatically a draft ontology of amphibian anatomy
- Jan 2007 - Dec 2008: **MorphologyNet**
  - Web/database server admin, web design, web application development
  - NSF-funded, freely available interactive library of 3D digital reconstructions of animal anatomy
- Apr 2004 - Apr 2005: **J3 Roving Eye, The Mobile Surveillance System**
  - Supervised a team of three Temasek Polytechnic students, developed a surveillance tool through the use of surveillance vehicles which transmit moving images via the wireless network
  - Singapore Splash Awards Wireless Jam 2005, Top Prize - Enterprise Category
- Jun 2000 - Jun 2001: **Mt Everest 2001, Mobile Satellite-Internet Expedition Webcasting System**
  - Satcom webcast for the Singapore Everest Mountaineering team at Everest Base Camp, Tibet

Grant Funding

- 2022: Google Data Center Grant ($48,000), APSU Coding Camps, GOOGLE
- 2021: Google Data Center Grant ($40,000), APSU Coding Camps, GOOGLE
- 2014: Revitalization for Academic Success Initiative ($4,400), Austin Peay State University
- 2012: Summer Research Fellows Program ($5,000), Austin Peay State University
- 2012: Faculty Research Award Grant ($500), Austin Peay State University
- 2011: Annual Equipment Award ($2,146), Austin Peay State University

Presentations

- L. Lee, M. Lees, and G. S. Ridenour, presentation to the IEEE IEMCON 2019, 10th IEEE Annual Information Technology, Electronics & Mobile Communication Conference on "Multi-Interval Data Mining of At-A-Station Hydraulic Geometry to Quantify Temporal Stability", Vancouver, British Columbia, Canada, Oct 17-19, 2019.
- L. Lee, and B. Myers, presentation to the ACM Mid-Southeast Conference on "TAS: A Teaching Allocation System to Manage Teaching Resources in a University Computer Science Department", Gatlinburg, Tennessee, USA, Nov 15-16, 2018.
- L. Lee, N. A. Coleman, and G. S. Ridenour, presentation to the CMCGS 2018, 7th Annual Int. Conf. on Computational Mathematics, Computational Geometry & Statistics on "Stochastic Modeling Of Hydraulic Geometry Using An Extremal Hypothesis", Singapore, Apr 9-10, 2018.
- L. Lee, M. Jones, G. S. Ridenour, S. J. Bennett, A. C. Majors, B. L. Melito, and M. J. Wilson, presentation to the 16th IEEE Int. Conf. on Computer and Information Technology (IEEE CIT 2016) on "Comparison of Accuracy and Precision of GPS-Enabled Mobile Devices", Yanuca Island, Fiji, Dec 7-10, 2016.

- L. Lee, G. S. Ridenour, M. Jones, S. J. Bennett, A. C. Majors, B. L. Melito, and M. J. Wilson, presentation to the ACM Mid-Southeast Conference on "Determining the Accuracy and Precision of Spatial Data through the Use of GPS-Enabled Mobile Devices", Gatlinburg, Tennessee, USA, Nov 12-13, 2015.
- L. Lee, presentation to the APSU Mathematics & Statistics Fall 2015 Research Seminar on "Protein Secondary Structure Prediction Using Blast and Exhaustive RT-RICO", Clarksville, Tennessee, USA, Sept 23, 2015.
- L. Lee, and G. S. Ridenour, presentation to the 2014 IEEE Symposium on Computational Intelligence and Data Mining on "Using Data Mining to Investigate Interaction between Channel Characteristics and Hydraulic Geometry Channel Types", Orlando, Florida, USA, Dec 9-12, 2014.
- L. Lee, M. Jones, G. S. Ridenour, M. P. Testa, and M. J. Wilson, presentation to the 2nd Annual International Conference on Geo-Informatics in Resource Management and Sustainable Ecosystem (GRMSE 2014) on "Investigating and Comparing Spatial Accuracy and Precision of GPS-Enabled Devices in Middle Tennessee", Ypsilanti, Michigan, USA, Oct 3-5, 2014.
- L. Lee, and G. S. Ridenour, presentation to the ACM Mid-Southeast Conference on "Data Mining for Hydraulic Geometry", Gatlinburg, Tennessee, USA, Nov 14-15, 2013.
- L. Lee, presentation to the Austin Peay State University Provost Lecture Series, on "Protein Secondary Structure Prediction Using BLAST and Exhaustive RT-RICO", Clarksville, Tennessee, USA, Nov 29, 2012.
- L. Lee, presentation to the ACM Mid-Southeast Conference on "Teaching a New Web User Interface Design Course to Computer Science - Web Technology Undergraduates", Gatlinburg, Tennessee, USA, Nov 15-16, 2012.
- L. Lee, J. L. Leopold, and R. L. Frank, presentation to the IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology 2012 on "Exhaustive RT-RICO Algorithm for Mining Association Rules in Protein Secondary Structure Sequence Data", San Diego, CA, USA, May 11, 2012.
- L. Lee, J. L. Leopold, and R. L. Frank, poster presentation to the IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology 2012 on "Protein Secondary Structure Prediction Using BLAST and Exhaustive RT-RICO, the Search for Optimal Segment Length and Threshold", San Diego, CA, USA, May 10, 2012.
- L. Lee, presentation to the ACM Student Chapter at APSU on "Design Principles for Web Development and Color", Clarksville, Tennessee, USA, Feb 16, 2012.
- L. Lee, presentation to the ACM Mid-Southeast Conference on "Is 80% the Limit of Prediction Accuracy for Protein Secondary Structure Prediction?" Gatlinburg, Tennessee, USA, Nov 10-11, 2011.
- L. Lee, presentation to the University of Missouri (MS&T) Biological Sciences Department Seminar Series on "Protein Secondary Structure Prediction", Rolla, MO, USA, Nov 1, 2010.
- L. Lee, J. L. Leopold, P. G. Edgett, and R. L. Frank, presentation to the ANNIE (Artificial Neural Networks in Engineering) 2010 Conference on "Rule Visualization of Protein Motif Sequence Data for Secondary Structure Prediction", St. Louis, MO, Nov 2, 2010.
- L. Lee, presentation to the University of North Carolina at Greensboro Department of Computer Science Colloquium on "Rule Visualization of Protein Motif Sequence Data for Secondary Structure Prediction", Greensboro, NC, USA, Oct 20, 2010.
- L. Lee, C. Kandoth, J. L. Leopold, and R. L. Frank, presentation to the International Conference on Computer, Electrical, and Systems Science, and Engineering on "Protein Secondary Structure Prediction Using Parallelized Rule Induction from Coverings", Bangkok, Thailand, Dec 27, 2009.
- L. Lee, J. Leopold, J. Albath, and A. Coalter, two presentations to the International Conference on Ontological and Semantic Engineering on "An Ontology Abstract Machine" and "A Generic, Functionally Comprehensive Approach to Maintaining an Ontology as a Relational Database", Rome, Italy, Apr 30, 2009.
- L. Lee, J. L. Leopold, R. L. Frank, and A. M. Maglia, presentation to the IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology 2009 on "Protein Secondary Structure Prediction Using Rule Induction from Coverings", Nashville, TN, USA, Mar 31, 2009.
- L. Lee, J. L. Leopold, R. L. Frank, and A. M. Maglia, presentation to the University of Missouri (MS&T) Department of Computer Science Seminar on "A Computational Data Mining Method for Identifying Non-Independent Patterns in Protein Motif Sequence Data", Rolla, MO, USA, Sept 27, 2007.

TEACHING & COURSE DEVELOPMENT EXPERIENCE

Austin Peay State University, Clarksville, Tennessee, USA
- Spring 2023: User Experience Design (in class & online), Graduate Work Experience
- Fall 2022: Database-Driven Web Development (UG & G, in class & online), Graduate Work Experience

- Summer 2022: User Experience Design (online), Graduate Work Experience, Master's Internship Project, Database-Driven Web Development (UG & G, online)
- Spring 2022: User Experience Design (in class & online)
- Fall 2021: Database-Driven Web Development (UG & G, in class & online)
- Summer 2021: Web User Interface Design (online), Graduate Work Experience, Master's Internship Project
- Spring 2021: Adv Web Development (synchronous online)
- Fall 2020: Web User Interface Design (synchronous online)
- Summer 2020: Adv Web Development (online), Web User Interface Design (online)
- Spring 2020: Adv Web Development (in class & online), APSU Junior Coders
- Fall 2019: Web User Interface Design (in class & online), APSU Junior Coders
- Summer 2019: Adv Web Development, Web User Interface Design, Professional Science Internship, Graduate Work Experience, APSU Coding Camps
- Spring 2019: Adv Web Development (in class & online), APSU Junior Coders
- Fall 2018: Web User Interface Design (in class & online), APSU Junior Coders
- Summer 2018: Intro to Web Development, Content Management Sys, Professional Science Internship, Internship in IT, Unrestricted Internship, APSU Coding Camps
- Spring 2018: Adv Web Dev, Content Management Sys, Internship in IT, Unrestricted Internship
- Fall 2017: Web Database Concepts, Internship in IT, CS Internship, Web User Interface Design (in class and online)
- Summer 2017: Adv Web Development, Content Management Sys, Professional Science Internship, APSU Coding Camps
- Spring 2017: Adv Web Development, Content Management Systems, Internship in IT, CS Internship
- Fall 2016: Web Database Concepts, Internship in IT, CS Internship, Web User Interface Design, Intro to Web Development
- Fall I 2016 Fort Campbell (online): Web User Interface Design
- Summer 2016: Content Management Systems, Professional Science Internship, Internship in IT
- Spring 2016: Adv Web Development, Internship in IT, CS Internship, Intro to Web Dev, Content Management Systems
- Spring II 2016 Fort Campbell (online): Adv Web Development
- Fall 2015: Web Database Concepts, Internship in IT, CS Internship, Web User Interface Design, Intro to Web Development
- Fall I & II 2015 Fort Campbell (online): Web User Interface Design, Adv Web Development
- Summer 2015: Adv Web Development, Content Management Sys., Professional Science Internship
- Spring 2015: Adv Web Development, Internship in IT, Intro to Web Dev, Content Management Sys
- Spring II 2015 Fort Campbell (online): Adv Web Development
- Fall 2014: Web Database Concepts, Internship in IT, Web User Interface Design, Intro to Web Dev
- Fall I & II 2014 Fort Campbell (online): Web User Interface Design, Adv Web Development
- Summer 2014: Adv Web Development, Intro to Database & Web Tech, Intro to Web Development
- Spring 2014: Adv Web Development, Internship in IT, Intro to Web Development, Programming Selected Lang I (Java) (in class & online)
- Spring II 2014 Fort Campbell (online): Adv Web Development
- Fall 2013: Web User Interface Design, Intro to Web Development (in class & online), Intro to Programming II (C++) (in class & online)
- Fall II 2013 Fort Campbell (online): Adv Web Development
- Summer 2013: Intro to Programming II, Adv Web Development
- Spring 2013: Adv Web Development, Programming Selected Lang I (in class & online), Intro to Programming I (C++)
- Spring I & II 2013 Fort Campbell (online): Intro to Programming I, Adv Web Development
- Fall 2012: Operating Systems (in class & online), Web User Interface Design, Intro to Visual Basic, Intro to Programming II
- Summer 2012: Intro to Web Development
- Spring 2012: Adv Web Development, Programming Selected Lang I (in class & online), Intro to Programming I (C++)
- Fall 2011: Operating Systems (in class & online), Intro to Visual Basic, Intro to Programming I

University of North Carolina at Greensboro, Greensboro, North Carolina, USA
- Spring 2011: Bioinformatics, Adv Data Structures (in Java), Elem Data Structures and Algorithms
- Fall 2010: Principles of Database Systems, Adv Data Structures (in Java), Foundations of Comp Sci I

Missouri University of Science and Technology, Rolla, Missouri, USA
- 2009-10: Taught classes for CS401 Adv Bioinformatics and CS311 Bioinformatics

Temasek Polytechnic, Singapore, May 1998 - Sept 2005
- Advanced Multimedia (game programming, Adobe Flash/ActionScript, Director and Lingo)
- Streaming Media (PHP, MySQL, Apache Web Server, Adobe Premiere, webcasting)
- User Interface Development (web interface design, Adobe Photoshop, Freehand)
- Networked Multimedia (web page building, HTML, Adobe Dreamweaver and Fireworks)