1. **Name, current academic rank, and tenure status**
   Li-Jen Y. Lester
   Associate Professor
   Tenured

2. **Date of original appointment to this faculty, followed by dates and ranks of advancement**
   September 1st, 2014 – Associate Professor
   September 1st, 2008 – Assistant Professor
   September 1st, 2007 – Visiting Professor
   September 1st, 2000 – Lecturer

3. **Degrees with fields, institutions, and dates**

Degree	Field	Institution	Date
Ed. D.	Higher Education Executive Leadership	Sam Houston State University, Huntsville, Texas	2007
M. A.	Industrial Technology	Sam Houston State University, Huntsville, Texas	1995
B. S.	Civil Engineering	Dahan Institute of Technology, Taiwan, Republic of China	1988

4. **If you do not have a formal degree in computer science, describe any course work you may have taken, or other ways in which you have achieved competence in computer science; there is no necessity to repeat information here which is contained in later sections of this document.**

Java Programming: Online Zybook Learning 2017
Python Programming: Online Learning 2017
Cybersecurity Education: Trainer Traiing 2016
Robotic Technician Training Program: 42 credit hours from George Brown College, Summer 2010
Ed.D. in Higher Education Executive Leadership including statistics analysis application and internship working with the Multimedia Center from the College of Education, Fall 2005 – Spring 2006
Cisco Certified Network Associate (CCNA), Cisco Certified Network Educator (CCNE), 2004
2 years in-service network and computer application training from Texas Department of Transportation, May 1998 – Aug. 2000
Graduate degree in Industrial Technology including 12 hours of multimedia application courses
Undergraduate degree fulfilled 12 hours of mathematic courses

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5. **Conferences, workshops, and professional development programs in which you have participated in the last 5 years to improved teaching and professional competence in computer science.**

> *Professional Development:*
> "We_Teach_CS Academy", ESC6 Workshops, January – August 2017
> "MathWork Workshop", BEST Inc, 2012-2016
> "NSF Workshop", College Station, October 2015.
> "Critical Thinking Test, Train the Trainer Workshop", San Diego, CA, August, 2015.
> "Robotics Competition through Academic Community Engagement for the BEST", Workshop at CCSC South Central Conference 2015, April 2015.
> "Community Engagement: Can This Happen within a Virtual Online Environment?". Gulf South Summit, March 2015.
> "Panel Discussion for ACE Practices", Texas Association of Deans of Liberal Arts & Sciences. February, 2015.
> "Art of Teaching Series". PACE, SHSU. Huntsville. Fall 2012/Spring 2013/Fall 2013/Spring, Fall 2014, & Spring 2015.
> "Successful Teaching, Starting Out Right". PACE, SHSU. Huntsville. Fall 2012.
> "Blackboard Training". DELTA, SHSU. Fall 2012.
> "Online Teaching Training". DELTA, SHSU. Spring/Fall 2012
> "Critical Thinking Skills". SHSU. Huntsville, TX, Oct – Nov, 2011.
> "Engage Your Students! ACE Your courses with Academic Community Engagement". SHSU, Huntsville, TX, May 11, 2011.
> "Problem-Based Learning Seminar", PACE SHSU, Huntsville, TX, May, 5, 2011
> "NSF Writing Workshop", SHSU, Huntsville, TX, April 15, 2011.
> "BEST Robotic Hub Workshop", Dallas, TX, March 26, 2011.
> "NSF Workshop", San Marcos, February 18, 2011.
> "MathLab Simulink Training", BEST Robotic Co. March - June, 2011.
> "How to ACE your course: Integrating Academic Civic Engagement in Teaching and Research" Panel. Fall 2010 College of Humanities and Social Sciences Teaching Conference, August 19, 2010.
>
> Editorial Review Board Member, JISE
> Editorial Review Board Member, JCIS
> Editorial Review Board of ACM/CAST and JICME
> Reviewer for British Journal of Applied Science & technology, IACIS, JISE, Higher Education Advanced (HEAd)
> Conference Director, ISECON 2012

Conferences:
"Sustainability in Greening IT for Educational Systems", EDSIG Conference
     on Information Systems and Computing Education, November 2017.
"Greening IT and Sustainability in Educational Systems", International
     Conference on Science, Engineering, and Technology Innovation,
     March, 2017.
 "Online Case Study of Designing a Learning Management System Module in
     Foundations of Science Course", Educational Special Group of the
     Association of Information Technology Conference, November 2016.
"Scoring the Open Source Learning Management Systems", 5th International
     Conference on Education and Management Innovation, February 2016.
"Developing Project Based Learning, Integrated Courses from Two Different
     Colleges at an Institution of Higher Education: An Overview of the
     Processes, Challenges, and Lessons Learned", conference on
     information systems applied research, November 2015.
"A Comparison Study in Open Source Learning Management Software",
     conference on information systems applied research, November 2015.
"Robotics Competition through Academic Community Engagement for the
     BEST", workshop for the Consortium for Computing Sciences in
     Colleges South Central. Apr. 2015.
"ACE Online Courses", the Fourth Annual SHSU Online Teaching & Learning
     Conference. March 2015.
"Community Engagement: Can This Happen within a Virtual Online
     Environment?", Gulf South Summit, March 2015.
"A Case Study Of Robotics Mentoring Programs For Promoting Stem Fields",
     Taipei, ITS Dec. 2014.
"Assessing Critical Thinking Skills in Online and Face-to-Face Platforms for an
     Interdisciplinary General-Education Science Course", Baltimore, MD,
     ISECON/CONISAR Nov. 2014.
"Mentoring Program for Retaining the Robotics Competition Teams",
     Macedonia, AUDEM, October, 2014.
"BEST Robotics Practices", Taichung, Taiwan, April, 2014.
"Academic Community Engagement Teaching Case: Driving Innovation
     through Project-Based Learning in Game Programming", San Antonio,
     TX, November 2013.
"BEST Council Meeting", BEST, Mobile, AL, April, 2013
"Texas Online Teaching Conference", TXDLA, Galveston, TX, March, 2013
"SET BEST Robotic Competition", SHSU, September/October 2012.
"Bridging Game-Programming into the K-12 Curriculum", ISECON 2012,
     New Orleans, Louisiana, November 2012.
"Academic Community Engagement", "Facilitating Best Fit in Online
     Programs", Alliance of Universities for Democracy 2012, Kielce,
     Poland, October 2012
"A Case Study: Applying Critical Thinking Skills to Computer Science and
     Technology", ISECON 2011, Wilmington, NC, November 2011.

"Academic Community Engagement Involvement at Sam Houston State
   University", Alliance of Universities for Democracy. Dubrovnik,
   Croatia, Oct. 21-26, 2011
"BEST Robotic National Conference", Auburn, AL, July 20 – 23, 2011.
"Beyond voting Active Citizenship in the New Era", American Democracy
   Project National Meeting, Orlando, FL, June 2-4, 2011.
"SouthEast Texas BEST Robotic Conference", SHSU, Huntsville, TX, May 11,
   2011.
"University Students' Computer Security Practices In Two Developing
   Nations: A Comparative Analysis", SHSU Business Conference 2011,
   Huntsville, TX, April 15, 2011.
"The Greening of the Information Systems Curriculum", ISECON 2010,
   Nashville, TN, November 2010.
"Peer Mentors and Their Impact for Beginning Programmers", ISECON 2010,
   Nashville, TN, November 2010.
"Leading to Success via Mentorship", IACIS 2010, Las Vegas, NV, October
   2010.
"Bridging Technology with Education", SMTE 2010, Hualien, Taiwan, January
   2010.

Workshops:
"Lilly Conference", Austin, Texas, January 2017
"Cybersecurity Education: Train the Trainer ", Pittsburgh, PA, NSF Workshop,
July 2016
"BEST Robotics Workshop". March 2015
"BEST Robotics Workshop". March 2014
"ACE Faculty Workshop", ACE, April, 2013
"Online Teaching Tools", TXDLA, March, 2013
"BEST Robotics Teacher Online Workshop", Summer 2012.
"Creating Windows Mobile Apps", Wilmington, NC. ISECON 2011.
"Mathlab Workshop", BEST Robotic. Inc. 2011.
"Scout@SAM - Computer Science", SHSU, February 12, 2011.
"DegreeWork Workshop", SHSU, February 11, 2011.
"BEST Robotic Hub Training Workshop". University of North Texas, Denton.
   November 19-20, 2010.
"Second Annual SHSU TECC Conference, Program Chair, Sam Houston State
   University, 2010.

6. **Consulting-list agencies and dates, and briefly describe each project.**

We_Teach_CS Academy, ESC6: Provide workshops from January – August
2017
Trained 12 high school teachers who would like to earn a CS teaching
certificate. I offered the classes of Robotics, Gaming Programming, and Python
Programming

7. Principal publications during the last five years. Given in standard bibliographic format.

Rice, M., Shannon, L. Y. (2018). Project-Based Learning: A Structure to Facilitate Service Learning in an Online Interdisciplinary Project. In *Community Engagement Best Practices Across the Disciplines: Applying Course Content to community Needs. H.E. (Ed).* Chapter 11. New York: Rowman & Littlefield.

Lester, L.Y. (2017). Sustainability in Greening IT for Educational Systems, EDSIG Conference on Information Systems and Computing Education, JISE, in press.

Shannon, L.Y., Rice, M. (2016) Scoring the Open Source Learning Management Systems. *International Journal of Information and Education Technology 7*(6). P.432-436.

Rice, M., Shannon, L. Y. (2016). Developing Project Based Learning, Integrated Courses from Two Different Colleges at an Institution of Higher Education: An Overview of the Processes, Challenges, and Lessons Learned. *Information Systems Education Journal.* 14(*3*). 55-62.

Shannon, L.Y., (2015). BEST Robotics Practices. *International Journal of Information and Education Technology.* 5(*3*). 179-183.

Rowe, M.P.; Gillespie, B.M.; Harris, K.R.; Koether, S.D.; Shannon, L.Y.; & Rose, L.A., (2015). Redesigning a General Education Science Course to Promote Critical Thinking. *Life Sciences Education.* 14, 1-12, Fall 2015.

Shannon, L.Y., (2015). Robotics Competition through Academic Community Engagement for the BEST, for the Consortium for Computing Sciences in Colleges South Central. Apr. 2015.

Shannon, L.Y., (2014). A case study of robotics mentoring programs for promoting stem fields. 5th International Conference on Internet Technologies & Society 2014.114-118.

Shannon, L.Y., & Dalat Ward, Y. (2014). A case study: From game programming to ICTs. In K.H., & T.X. (Eds.), *ICTs and the Millennium Development Goals-A United Nations Perspective.* Chapter 14. New York: Springer.

Shannon, L.Y., & Dalat-Ward, Y. (2013). Academic community engaged teaching case: Driving innovation through project-based learning in game programming. 2013 ISECON Proceeding of the Information Systems Educators Conference. 30. No.2711.

Shannon, L.Y., & Dalat-Ward, Y. (2012). Bridging Game-Programming into the K-12 Curriculum. *2012 ISECON Proceeding of the Information Systems Educators Conference.*29. No.1937.

Shannon, L.Y., & Bennett, J.F. (2012). A case study: Applying critical thinking skills to computer science and technology. *ISEDJ.* 10(4).41-48.

NCATE & ISTE Program Evaluation Report. (2012). Sam Houston State University.

Pselask, A., Shannon, L.Y., & Ceccucci, W. (2011). An empirical study of cell phone and smartphone usage. *Issues in Information Systems*. XII (*1*). 207-417.

Lomo-David, E., Bilecik, A. A., Chapman, B.F., & Shannon, L.Y. (2011). University students' computer security practices in two developing nations: A comparative analysis. *Business Studies Journal*. 3(*2*). No. 2.

Sendall, P., Shannon, L.Y., Peslak, A.R., & Saulnier, B. (2011). The Greening of the Information Systems Curriculum. *ISEDJ*.9(*5*).27-45.

Hartness, K., Shannon, L.Y. (2011). Peer Mentors and Their Impact for Beginning Programmers. *ISEDJ*. 9(*6*).21-29.

Shannon, L.Y., Hartness, K. (2010). Leading To Success Via Mentorship. *Issues
        in Information Systems*. XI(*1*). 525 – 532.

Shannon, L.Y., Hartness, K. (2010). Mentorship: A Bridge to Retention, *ACET Journal of Computer Education and Research*. 6(*1*).

8. **Other scholarly activity during the last 5 years: grants, sabbaticals, software development, etc.**

TIG Grant SHSU 2017: Computational Thinking Practices for Programming Courses, ($11,000, not awarded)

Mini Assessment Grant SHSU 2017: CS ABET Course Assessment Project ($1,000, not awarded)

FAST Award SHSU 2017, "Training Mentors for Boosting Engineering, Science, and Technology Summer Camp – BEST Robot at SHSU" ($10,000 – Not Awarded)

Texas Workforce commission, August 2016, "Texas BEST Robotics Competition Grant", Partnership with BEST Inc. ($337,450 – Awarded)

Rotary District Grant, July 2016, "3D Printer Prosthetics Devices" ($2,000 – Awarded).

MathWorks Mini-Grant, "BEST Mentoring Program", PI, June 2015 ($3,000 – Awarded)

Rotary District Grant, "TBRI Parent/ Advocate/ Educator Training", PI, June 2015 ($2,400 – Awarded)

Texas Workforce Commission, "Texas High School Competitive Robotics Education Team Development and Support Program", Partnership, Submitted February 2015 ($114,152 – Not Awarded)

BEST Inc. Mini-Grant, "BEST Mentoring Program", PI, June 2014 ($3,000 – Awarded)

Sam Houston State University Faculty Research Grant (FRG) 2014, "Undergraduate Research in BEST Practices", PI, Submitted October 2013 ($4,933.36 – Not Awarded)

Texas Workforce Commission, "Texas High School Competitive Robotics Education Team Development and Support Program", PI, Submitted February 2014 ($234,831 – not awarded)

NSF Discovery Research K-12 2014, "Promoting and Accelerating Science Education through Interactive Teaching (PASE-IT)", Co-PI, submitted December, 2013 ($447,144 – not awarded)

NSF 13-542 2013: "DBI-BIO Research Experience for Undergraduates Sites", Evaluator ($ 281,281- not awarded)

Undergraduate Research Grant, College of Sciences, Sam Houston State University 2013, "Application for Robotics Undergraduate Research Team", PI, Submitted May 2013 ($6,000 – not funded)

Keck Foundation, "ASPIRE: Activating Students' Participation in Research Experience", submitted April, 2011 ($248,000 – not awarded)

NSF 10-619: Computing Education for the 21st Century, **"Building a Rich Community of Computer Science Students and Teachers", submitted April, 2011 ($849.348 – not awarded)

NSF10-610: Discovery Research K-12, "Promoting STEM education through Renewable Energy Systems using Web 2.0. Interactive Platform", submitted January, 2011 ($450,000 – not awarded)

Texas Workforce Commission, "Texas High School Competitive Robotics Education Team Development Program", Aug 2010 – Aug. 2011, ($235,600 - partnership)

IES: Education Research Grant: CFDA Number 84.305A, "Evaluating Learning via Web 2.0/3.0 Technology and Educational Robotic Programs", submitted April, 2010 ($ 2.4 million – not awarded).

NSF: Cyberinfrastructure Training, Education, Advancement, and Mentoring for Our 21st Century Workforce, Submitted April, 2010. ($ 1 million – not awarded).

Sam Houston State University Competitive Intramural Enhancement Research Grant (ERG), "Instructional Technology web 2.0 Software in Educational Systems", June 2010 – 2011 ($13,623).

Texas Youth in Technology Grant Program, Texas Workforce Commission, 2008 - 2010 ($178,000).

9. **Awards**

Best Paper of The 2016 5th International Conference on Education and Management Innovation (ICEMI 2016), February 2016. **"Scoring the Open Source Learning Management Systems".

Meritorious Paper of The 2011 Conference, Information Systems Educators Conference (ISECON), November, 2011. "A Case Study: Applying Critical Thinking Skills to Computer Science and Technology".

Distinguished Paper of The 2010 Conference, Information Systems Educators Conference (ISECON), October, 2010. "The Greening of the Information Systems Curriculum".

Outstanding Paper in Other Business Disciplines Track, General Business Conference, April, 2009, Sam Houston State University. "Information System Security and Safety Measures: The dichotomy Between Students' Familiarity and Practice".

Best Paper of The 2009 Conference, Information Systems Educators Conference (ISECON), November, 2009. "Critical Thinking Measurement in ICT".

Distinguished Paper of The 2007 Conference, Information Systems Educators Conference (ISECON), November, ISECON 2007. "Information and Communication Technology Literacy Issues in Higher Education".

Ten Outstanding Students Award at Dahan Institute of Technology, Taiwan, Republic of China 1985.

10. **Courses taught this and last academic year term-by-term. This year is the academic year in which this Self-Study report is prepared; the last year was the year prior to this. If you were on sabbatical leave, please enter the information for the previous year. Please list each section of the same course separately.**

Term/Year	Course Number	Course Title	Semester Hours	Class Size
Fall 2017	COSC4349	Professionalism and Ethics	3	38
	CSTE5338	Development of Technology Infrastructure in School	3	10
Summer 2017	CSTE5336	Educational Multimedia	3	4
Spring 2017	CSTE5336	Educational Multimedia	3	10
	CSTE7335	Management Application Analysis	3	15
Fall 2016	CSTE7335	Management Application Analysis	3	7
Summer 2016	CSTE7325	Technology Sustainability	3	9
Spring 2016	CSTE7335	Management Application Analysis	3	14
	CSTE5338	Development of Technology Infrastructure in School	3	10
Fall 2015	CSTE5338	Development of Technology Infrastructure in School	3	15
	CSTE7335	Management Application Analysis	3	8
Summer 2015	CSTE5336	Educational Multimedia	3	8
	CSTE5337	Designing Instructional Materials for the Web	3	14

	COSE5340 /CSTE7335	Management Application Analysis	3	3
Spring 2015	CSTE5336	Educational Multimedia	3	17
	CSTE5338	Development of Technology Infrastructure in School	3	5
	COSE5340 /CSTE7335	Management Application Analysis	3	12
Fall 2014	CSTE5337	Designing Instructional Materials for the Web	3	5
	CSTE5338	Development of Technology Infrastructure in School	3	14
Summer 2014	CSTE5336	Educational Multimedia	3	7
	CSTE5337	Designing Instructional Materials for the Web	3	14
Spring 2014	CSTE5319	Critical Analysis of Instructional Software	3	7
	CSTE533601	Educational Multimedia	3	17
	CSTE5338.01	Development of Technology Infrastructure in School	3	8
	CSTE5338.02	Development of Technology Infrastructure in School	3	9
Fall 2013	CSTE5319	Critical Analysis of Instructional Software	3	22
Fall 2013	CSTE5337.01	Designing Instructional Materials for the Web	3	8
Fall 2013	CSTE5337.02	Designing Instructional Materials for the Web	3	9
Summer 2013	CSTE5319	Critical Analysis of Instructional Software	3	9
Spring 2013	CSTE533601	Educational Multimedia	3	14
Spring 2013	CSTE5319	Critical Analysis of Instructional Software	3	8

11. Other assigned duties performed during the academic year, with average hours per week. Indicate which, if any, carry extra compensation. If you are course coordinator for courses taught by other than full-time faculty, please indicate here which courses.

Assistance Chair for CS Department (16' – 18') First Year Experience, Forward Program Committee (15'-) Academic Community Engagement Committee (11'–15')

> American Democracy Project Steering Committee (11'–12')
> Computer Science Graduate Curriculum Committee (12'-)
> Computer Science Undergraduate Curriculum Committee (07'–11')
> Curriculum and Instruction/Computer Science Doctoral in Instructional (09'-)
> Protection of Human Subjects Committee (10'-12')
> Quality Enhancement Project Committee (08'-)
> SHSU Technology Education and Communication Conference Committee (09'-)

12. Number of students for which you service as academic advisor: _____**29**

13. Estimate the percentage of your time devoted to scholarly and/or research activities: _____**20**___**%. Please give a brief description of your major research and scholarly activities:**

> Computer Education, P – 16 Technology Alignment, Case Study, Critical Thinking Skills, Applying robotic curriculum into P-16, Problem-Based Learning.

14. If you are not a full-time faculty member, state what percentage of full-time you work: _____ **% Percentage of this time allocated to the computer science program being evaluated:** _____ **%.**