TEXAS STATE VITA

I. ACADEMIC / PROFESSIONAL BACKGROUND

A. Name: Farhad Ameri **Title: Professor**

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Doctorate	2006	University of Michigan Ann Arbor	Manufacturing Engineering	Semantic Web-Based Framework for Supply Chain Deployment in Digital Manufacturing Market
Master's	1999	Sharif University of Technology Tehran, Iran	Industrial Engineering	Rule-Based Feature Recognition for Asymmetric Rotational Components Using B-Rep Model
Bachelor's	1997	Iran University of Science and Technology – Tehran, Iran	Industrial Engineering	On-line application of Coordinate Measuring Machine for QC purposes

C. University Experience

Position	University	Dates
Professor	Texas State University	2020-present
Associate Professor	Texas State University	2015-2020
Assistant Professor	Texas State University	2009- 2015
Postdoctoral Research Associate	Clemson University, South Carolina	2007 – 2008
Graduate Research Assistant	University of Michigan, Ann Arbor	2002 – 2006
Lecturer, Industrial Eng. Department	Azad University, Tehran - Iran	1999-2001
Graduate Research Assistant	Sharif University of Technology, Iran	1997 – 1999
Undergraduate Research Assistant	Iran University of Science & Technology, Tehran	1996 – 1997

D. Relevant Professional Experience

Position	Entity	Dates
Intern	Ford Motor Company, Dearborn, MI	Spring/summer2005
Project Lead - Systems Engineer	Nirvan Engineering Consulting Co., Tehran, Iran	1997 – 2001

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:

- Favorite Professor Award - Alpha Chai National Honor Society -2012
- Favorite Professor Award - Alpha Chai National Honor Society -2016

B. Courses Taught:

Texas State University, Department of Engineering Technology:

Undergraduate Courses:

- TECH 2330: Fundamentals of Material Removal
- TECH 4391: Manufacturing Processes II
- TECH 4345: Methods Engineering and Ergonomics
- TECH 4357: Facilities Planning
- TECH 4395: Automated Manufacturing Systems I
- TECH 4396: Automated Manufacturing Systems II
- TECH 4398: Senior Design

Graduate Courses:

- TECH 5364: Robust Product and Process Design
- TECH 5394: Design of Industrial Experiments
- TECH 5310: Product Design and Development
- TECH 5391: Advanced Manufacturing Systems

Clemson University, Department of Mechanical Engineering (2007-2008):

- ME 402 – Senior Design Project (Michelin Tweel for In-Line Skates)- Committee member
- ME 402 – Senior Design Project (Shear fixture design)- Committee member
- ME 455 – Design for Manufacturing (graduate level) – Instructor

University of Michigan, Department of Mechanical Engineering (2003-2006):

- MFG 501 – Topics in Manufacturing -Graduate Instructor Assistant
- ME 452 – Design for Manufacturability- Graduate Instructor Assistant

Azad University, Department of Industrial Engineering (2000-2001):

- Mechanical Design and Drafting I and II (undergraduate level), Instructor
- English for Industrial Engineers (undergraduate level), Instructor
- FMS/CNC Lab instructor (undergraduate level)

C. Graduate Theses/Dissertations or Exit Committees (if supervisor, please indicate):

- PhD Committees Served:
    - Ph.D dissertation, External Committee Member, Foivos Psarommatis-Giannakopoulos, 2020, EPFL Switzerland, Dissertation Title: A Dynamic

Scheduling Tool and a Methodology for Creating Digital Twin of Manufacturing Systems for Achieving Zero Defect Manufacturing.

- Ph.D dissertation, Committee Member, Maedeh Dabbaghain Amiri, 2017, MSEC Program, Dissertation Title: Polymer/clay nanocomposite self-assembly for gas barrier films application.
- Ph.D dissertation, External Committee Member, Thomas Gmeiner, Department of Mechanical Engineering, Technical University of Munich, Germany, Defense Date: November 2014, Dissertation title: Automatic Fixture Design Based on Formal Knowledge Representation, Design Synthesis and Verification Committee Chair: Dr. Kristina Shea, Dissertation Title: Automatic Fixture Design Based on Formal Knowledge Representation, Design Synthesis and Verification
- Ph.D dissertation, External Committee Member, Eric Devendorph, Department of Mechanical and Aerospace Engineering, University at Buffalo – SUNY, Defense Date: January 2011, Committee Chair: Dr. Kemper Lewis. Dissertation Title: The Impact of Solution Process Architecture on the Dynamics of Distributed Design Processes.

- M.S Committees Served:

  - MS Thesis , **committee chair**, Ali Ghanbari, Department of Engineering Technology, Texas State University, Thesis Title: Construction Demand Forecasting Based on Conventional and Supervised Machine Learning Methods, Defense Date: May 2019.
  - MS Thesis , **committee chair**, Ramin Sabbagh, Department of Engineering Technology, Texas State University, Thesis Title: Semantic Text Analytics Technique for Classification of Manufacturing Suppliers, Defense Date: May 2018.
  - MS Thesis , **committee chair**, Peyman Yazdizadeh Shotorbani, Department of Engineering Technology, Texas State University, Thesis Title: Text Mining Techniques for Analyzing Unstructured Manufacturing Data , Defense Date: August 2016
  - MS Thesis , committee member, Zeid Almusaied, Department of Engineering Technology, Texas State University, Thesis Title: Optimization of Solar Energy Harvesting: Building Infrastructure and Statistical Optimization, Defense Date: April 2016,
  - MS Thesis , **committee chair**, Alolika Mukhopadhyay Department of Engineering Technology, Texas State University, Thesis Title: An Ontological Approach to Engineering Requirements Analysis and Modeling, Defense Date: August 2015. Currently a Ph.D. Student at Northeastern University, Department of Mechanical Engineering.
  - MS Thesis , **committee chair**, Mina Amini , Department of Engineering Technology, Texas State University, Thesis Title: Parametric Time Estimation for Additive Manufacturing, Defense Date: November 2014
  - MS Thesis , **committee chair**, Maedeh Dabbaghianamiri , Department of Engineering Technology, Texas State University, Thesis Title: Agent-based Model

for Supplier Selection in Digital Manufacturing Market , Defense Date: November 2014
    - MS Thesis, **committee chair**, Hayden Beauchamp, Department of Engineering Technology, Texas State University, Thesis Title: Discrete Integer Programming for Optimization in Agile Supply Chains, Defense Date: May 2013
    - MS Thesis , committee member, Xuesong Yang, Department of Engineering Technology, Texas State University, Thesis Title: Graphene based highly sensitive Bio-sensor, Advisor: Dr. Maggie Chen, Defense Date: April 2014
    - MS Thesis , committee member, Ximena Mcknee , Department of Engineering Technology, Texas State University, Defense Date: May 2012
    - MS Thesis , committee member, Mohammad Hayasi , Department of Engineering Technology, Texas State University, Defense Date: May 2012, Thesis Title: The Improvement of the Fully Dense Freeform Fabrication (FDFF) Process by Designing the Angular Adaptive Slicing Algorithm and Design of Experiments.

- Directed Project Committees Served:
    - Committee Chair, Kuan Goh, Defense Date: December 2020
    - Committee Chair, Justin Edwards, Defense Date: December 2020
    - Committee Chair, Snehal Desavle, Defense Date: May 2021
    - Committee Chair, Cindy, Defense Date: May 2021
    - Committee member, Celeste, Defense Date: August 2020
    - Committee member, Connor, Defense Date: May 2021
    - Committee Chair, Ekundayo, Defense Date: May 2021
    - Committee Chair, Jordan Hess, Defense Date: XXXX
    - Committee Chair, Richard Weist, Defense Date: XXXX
    - Committee Chair, Steven Speer, Defense Date: XXXX
    - Committee Chair, Brandon Lute, Defense Date: XXXX
    - Committee Chair, David Buchanan, Defense Date: XXXX

D. Courses Prepared and Curriculum Development:

a. Course Revisions:

- Revising TECH 4357 (Facilities Planning)
- Revising TECH 4345 (Methods Engineering and Ergonomics)
- Revising TECH 4391 (Computer Integrated Manufacturing)
- Revising TECH 5364 (Statistical Process Control)

b. New Course Proposals:

- TECH 5310 (Product Design and Development)
- TECH 2310 (Computer Aided Design)
- TECH 4395 (Automated Manufacturing systems I)

- TECH 4396 (Automated Manufacturing systems II)
- TECH 4362 (Manufacturing Process Engineering)
- TECH 5391 (Advanced Manufacturing Systems)
- TECH 1311 (Engineering Design Graphics)
- TECH 2340 (Environmental Technology I)
- TECH 3340 (Environmental Technology II)
- TECH 4340 (Design for Environment)

c. New Course Development:

- TECH 5310 (Product Design and Development) - Spring 2012
- TECH 5364 (Robust Product and Process Design)- Fall 206
- TECH 4398 (Senior Design) – Spring 2016
- TECH 4395 (Automated Manufacturing Systems I) – Fall 2015
- TECH 4396 (Automated Manufacturing Systems II) – Spring 2016

d. New Program Proposals:

- Civil Engineering Technology (Concentration under ET Program) , Fall 2015

E. Funded External Teaching Grants and Contracts:

None

F. Submitted, but not Funded, External Teaching Grants and Contracts:

None

G. Funded Internal Teaching Grants and Contracts:

- **Senior Design Grant**: Designing wrist splint for TFCC injuries, February 2016, Amount: $800
- **Senior Design Grant:** Designing Electrode Mandrel Removal Tool, Commercial Metal Company (CMC), Spring 2019, Amount: $1200

H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

None

I. Other:

None

III. SCHOLARLY/CREATIVE

A. Works in Print

1. **Books: and Book Chapters:**

a. Books:
   1) **Farhad Ameri**, "Supply Chain Standardization: An Ontological Approach," VDM Verlag Dr. Mueller Publisher, Saabruecken, Germany, ISBN: 978-3-8364-2120-1, 2008.

b. Textbooks:
   None

c. Edited Books
   1) **Farhad Ameri**, Kathryn Stecke, Gregor von Ceminski, Dimitris Kiritsis, Advances in Production Management Systems: Production Management for the Factory of the Future, IFIP AICT 566, APMS 2019, Part I: 978-3-030-29999-6, Springer, September 2019.
   2) **Farhad Ameri**, Kathryn Stecke, Gregor von Ceminski, Dimitris Kiritsis, Advances in Production Management Systems: Towards Smart Production Management Systems, IFIP AICT 567, APMS 2019, Part II: 978-3-030-29995-8, Springer, September 2019.

d. Chapters in Books:

   1) **Farhad Ameri** (CO), Kristina Shea, Manufacturing Capability Knowledge Modeling for Intelligent Manufacturing Systems, Advances in Computers and Information in Engineering Research (ACIER), ASME Publishing, New York, NY, August 2014.
   2) **Farhad Ameri** (CO), Joshua D. Summers**,** Multi-Agent Systems in Engineering Design of Fixture Systems, IEEE *Handbook of Research on Artificial Intelligence in Industrial Information Systems*, ed. W. Zha, IGI Publishing, Hershey, PA, 2009.

a. Creative Books:
   None

2. Patents

1) **Farhad Ameri**, Title of Invention: Automatically Build a Manufacturing Supply Chain for Handling a Production Work Order, U.S. Application Number: 62768,739, Filing Date: 11/16/2018, Application type: Provisional.

3. Articles

Google Scholar Citations: 1288	**h-index:** 14

a. Refereed Journal Articles:

(CO: Corresponding Author, ST: Student Author)

1) Ramin Sabbagh (ST), **Farhad Ameri** (CO), A Framework Based on K-Means Clustering and Topic Modeling for Analyzing Unstructured Manufacturing Capability Data,

ASME Journal of Computing and Information Systems in Engineering (JCISE), DOI: 10.1115/1.4044506, Volume 20, Published online September 2019

2) Mohamed Hedi Karray (CO), **Farhad Ameri**, Melinda Hodkiewucz, Thiery Louge, ROMAIN: Towards a BFO Compliant Reference Ontology for Industrial Maintenance, Journal of Applied Ontology, Vol. 14, No. 2, pp. 155-177, April 2019. DOI: 10.3233/AO-190208.
3) Michael P. Brundage (CO), Thurston Sexton, Melinda Hodkiewicz, KC Morris, Jorge Arinez, **Farhad Ameri**, Jun Ni, and Guoxian Xiao, Where Do We Start? Guidance for Technology Implementation in Maintenance Management for Manufacturing. ASME. *Journal of Manufacturing Science and Engineering,* July 2019; 141(9):091005-091005-16. doi:10.1115/1.4044105.
4) Ramin Sabbagh (ST), **Farhad Ameri** (CO), Reid Yoder, Thesaurus-Guided Text Analytics Technique for capability-based classification of manufacturing Suppliers, ASME Journal of Computing and Information Systems in Engineering (JCISE), Vol. 18, Issue, July 2018. DOI: 10.1115/1.4039553
5) Peyman Yazdizadeh Shotorbani (ST), **Farhad Ameri** (CO), Concept-based Text Mining Technique For Semantic Classification of Manufacturing Suppliers, *ASTM International Journal of Smart and Sustainable Manufacturing Systems (SSMS)*, Volume 1, Issue 1, February 2017. DOI:10.1520/SSMS20160005
6) Alolika Mukhopadhyay(ST), **Farhad Ameri** (CO), An Ontological Approach to Engineering Requirements Representation and Analysis , *Artificial Intelligence for Engineering Design, Analysis & Manufacturing (AIEDAM),* Special issue: Engineering Design Informatics, Cambridge University Press, Vol. 30, No.4, January 2016.
7) Maedeh Dabbaghian Amiri (ST), **Farhad Ameri (CO)**, Jesus Jimenez, Agent-based Simulation and Modeling for Service Allocation in the Digital Manufacturing Market, International Journal of Agent Technologies and Systems (IJATS), Volume 7, Issue 2, 2015.
8) Hayden Beauchamp (ST), Clara Novoa (CO), **Farhad Ameri**, Supply chain optimization in digital manufacturing market, International Journal of Operations Research and Information Systems (IJORIS), Volume 6, Issue 1, February 2015
9) **Farhad Ameri (CO)**, Boonserm Kulvatunyou, Nenad Ivezic, Ontological Conceptualization Based on Simple Knowledge Organization System (SKOS), *ASME Journal of Computing and Information Science in Engineering (JCISE),* DOI: 10.1115/1.4027582 *May 2014.*
10) **Farhad Ameri (CO),** Christian McArthur (ST), Semantic Rule Modeling for Intelligent Supplier Discovery, *International Journal of Computer Integrated Manufacturing (IJCIM),* DOI**:**10.1080/0951192X.2013.834467, September 2013.
11) **Farhad Ameri (CO)**, Christian McArthur (ST), Agent-based System for Supply Chain Configuration, *International Journal of Advanced Manufacturing Technology*. Vol. 62, pp 1-16, DOI: 10.1007/s00170-012-4392-9, July 2012
12) Madhu Kayyar, **Farhad Ameri,** Joshua D. Summers(CO), A Case Study of the Development of a Design Enabler Tool to Support Frame Analysis for Wright Metal, International Journal of Computer-aided Engineering and Technology, Vol. 4, No. 4, pp 321-329, 2012.

13) **Farhad Ameri (CO)** and Lalit Patil, Digital Manufacturing Market: A Semantic Web-based Framework for Agile Supply Chain Deployment, Journal of Intelligent Manufacturing , Vol. 23, Issue, 5, pp 1817-1832, DOI 10.1007/s10845-010-049, 2012.
14) **Farhad Ameri (CO)**, Christian McArthur (ST), Bahram Asiabanpour (TX), Mohammad Hayasi (ST), A Web-based Framework for Semantic Supplier Discovery for Discrete Part Manufacturing, NAMRI/SME Transaction, Volume 39, March 2011.
15) Chiradeep Sen, **Farhad Ameri (CO)**, Joshua D. Summers, Entropic Method for Sequencing Discrete Design Decisions, ASME Journal of Mechanical Design, Vol. 132, Issue 10, September 2010.
16) Kristina Shea (CO), Christoph Ertelt, Thomas Gmeiner, **Farhad Ameri**, Design-to-Fabrication Automation for the Cognitive Machine Shop, Journal of Advanced Engineering Informatics, Vol. 24, pp 251-268, 2010.
17) Sertac Pehlivan, **Farhad Ameri (CO)**, Joshua D. Summers, An Agent-Based System *Approach to Fixture Design.*International Journal of Computer Applications in Technology*, Special Issue: Decision Support Systems for Collaborative Design and* Manufacturing, Vol. 36, No. 3-4, pp 284-296, 2009.
18) **Farhad Ameri (CO)** and Deba Dutta, A Matchmaking Methodology for Supply Chain Deployment in Distributed Manufacturing Environments *ASME Journal of* Computing and Information Science in Engineering, Special issue on Engineering Informatics, Vol.8, No. 1, March 2008.
19) **Farhad Ameri (CO)**, Joshua D. Summers, Gregory Mocko, and Matthew Porter, Engineering Design Complexity: An Experimental Study of Methods and Measures, Research in Engineering Design , Vol. 19, No. 2-3, pp-161-179, November 2008.
20) **Farhad Ameri (CO)** and Joshua D.Summers, FIXON:An Ontology for Representation of Fixture Design Knowledge, Computer-Aided Design and Applications, Vol.5, No.5, June 2008 .
21) **Farhad Ameri (CO)** and Deba Dutta, Description Logic for Formal Representation of Manufacturing Resources, Transactions of North American Manufacturing Research Institute/SME ,Vol. 35, July 2007 .
22) **Farhad Ameri (CO)** and Deba Dutta, Product Lifecycle Management: Closing the knowledge loops. Computer-Aided Design and Applications, Vol. 2, No. 5, pp: 577-590, 2005.

c. Under Review Refereed Journal Articles:

- Mohamed Hedi Karray , Xu Da, J. Neil Otte, Rahul Rai, **Farhad Ameri**, Boonserm Kulvatunyou, Dimitris Kiritsis, Barry Smith, The Industrial Ontologies Foundry (IOF): Coordinated Evolution of Ontologies to Support Semantic Interoperability in the Industrial Domain (CJEN-2018-0105), Journal of Engineering Design, submitted March 2019.

- Sungku Kang, Lalit Patil, Farhad Ameri , Automated feedback generation for formal manufacturing rule extraction, Submitted CAD journal, April 2019.

d. Working Refereed Journal Articles:

- Ali Ghanbari, **Farhad Ameri** (CO), Construction Demand Forecasting Based on Conventional and Supervised Machine Learning Methods, Journal of Construction Management and Economics, planned submission date: October 2019

- Bongjun Ji, **Farhad Ameri**, Junhyuk Choi, Hyunbo Cho, Hybrid Approach Using Ontology-supported Case-based Reasoning and Machine Learning for Defect Rate Prediction, Journal of Production Research, planned submission date: November 2019
- Bongjun Ji, **Farhad Ameri**, Root-cause analysis enabled by ontological reasoning in industrial maintenance, Computers in Industry (CI), planned submission date: November 2019

d. Non-refereed Articles:
None

3. Conference Proceedings

a. Refereed Conference Proceedings:

1) **Farhad Ameri (CO)**, Evan Wallace, Boonserm Kulvatanyou, and Chris Will, Towards a Reference Ontology for Supply Chain Management, *Proceedings of International* Conference *on Interoperability for Enterprise Systems and Applications (I-ESA), IOF Workshop*, November 2020, France, Tarbes.
2) Melinda Hodkiewicz (CO), Caitlin Woods, **Farhad Ameri**, and Emily Low, Towards a Reference Ontology for Maintenance Work, *Proceedings of International* Conference *on Interoperability for Enterprise Systems and Applications (I-ESA), IOF Workshop*, November 2020, France, Tarbes.
3) Hedi Karray (CO), Neil Otte, Dimitris Kiritsis, Rahul Rai, **Farhad Ameri**, Boonserm Kulvatunyou, Chris Will, Rebeca Arista and Barry Smith, Industrial Ontology Foundry Perspectives , *Proceedings of International* Conference *on Interoperability for Enterprise Systems and Applications (I-ESA), IOF Workshop*, November 2020, France, Tarbes.
4) **Farhad Ameri (CO)**, Evan Wallace, Reid Yoder, Enabling Traceability in Agri-Food Supply Chains Using an Ontological Approach, ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, *ASME IDETC2020-19995, August 2020, St. Louis, MO.*
5) **Farhad Ameri (CO)**, Reid Yoder, Kimia Zandbiglari, SKOS Tool: A Tool for Creating Knowledge Graphs to Support Semantic Text Classification, Advances in Production Management Systems. Towards Smart and Digital Manufacturing. APMS 2020. IFIP Advances in Information and Communication Technology, vol 592. Springer, September 2020, Novi Sad, Serbia. DOI: https://doi.org/10.1007/978-3-030-57997-5_31

6) **Farhad Ameri (CO)**, Boonserm Kulvatanyou, Modeling a Supply Chain Ontology Based on a Top-Level Ontology, ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, *Volume 1B: 38th Computers and Information in Engineering Conference, ASME IDETC2019-98278, August 2019, Anaheim, CA.*
7) Barry Smith (CO), **Farhad Ameri**, Hyunmin Cheong, Dimitris Kiritsis, Boonserm Kulvatunyou, Evan Wallace, Dusan Sormaz, and Neil Otte, A First-Order Logic Formalization for the Industrial Ontology Foundry Using Basic Formal Ontology, *Joint Ontology Workshop (JOWO), 10th International Workshop of Formal Ontology Meet Industry (FOMI)*, Graz, Austria, September 2019.
8) Bongjun Ji, **Farhad Ameri**, Junhyuk Choi, Hyunbo Cho (CO), Hybrid Approach Using Ontology-supported Case-based Reasoning and Machine Learning for Defect Rate Prediction, APMS 2019, IFIP Advances in Information and Communication Technology, vol 566. Springer, Cham, DOI https://doi.org/10.1007/978-3-030-30000-5_37
9) **Farhad Ameri (CO)**, Reid Yoder, A Thesaurus-enabled Method for Smart Maintenance Diagnosis, IFIP APMS 2019, IFIP Advances in Information and Communication Technology, vol 566. Springer, Cham. DOI **DOI**https://doi.org/10.1007/978-3-030-30000-5_88.
10) Sabbagh R, **Ameri F.** (CO), Supplier Clustering Based on Unstructured Manufacturing Capability Data. ASME. International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, *Volume 1B: 38th Computers and Information in Engineering Conference, ASME IDETC2018-85865, August 2018,Quebec City, Canada* doi:10.1115/DETC2018-85865.
11) Damian Arena, **Farhad Ameri**, Dimitris Kiritsis, Skill Modeling for Digital Factories, APMS 2018, Seoul, South Korea, September 2018.
12) Ramin Sabbagh, **Farhad Ameri** (CO**)**, A Thesaurus-guided Text Analytics Technique for Capability-based Classification of Manufacturing Suppliers, ASME IDETC2017-67652, August 2017, Cleveland, OH (**CONFERENCE BEST PAPER AWARD**).
13) **Farhad Ameri,** William Bernstein, A Thesaurus-guided framework for Visualization of Unstructured Manufacturing Capability Data, IFIP Advances in Production Management Systems (APMS), September 2017, Hamburg, Germany.
14) Kimberly Talley, **Farhad Ameri**, Measuring the Effects of a Making-Based Senior Design Project in Engineering Technology, Annual American Society of Engineering Education (ASEE) Conference, June 2017, Columbus, OH.
15) Peyman Yazdizadeh, **Farhad Ameri**, A Hybrid Method for Manufacturing Text Mining Based on Document Clustering and Topic Modeling Techniques, Advanced Production Management Systems (APMS)- Special Session: Cyber-physical Technology Deployments in Smart Manufacturing System, September 2016, Iguassu Falls, Brazil.
16) **Farhad Ameri**, Ramin Sabbagh, Digital Factories for Capability Modeling and Visualization, Information Systems, Advanced Production Management Systems (APMS)- Special Session: Cyber-physical Technology Deployments in Smart Manufacturing System, September 2016, Iguassu Falls, Brazil
17) **Farhad Ameri** , Boonserm Kulvatunyou , Nenad Ivezic , A Formal Process for Community-based Reference Model Evolution for Smart Manufacturing Systems, APMS

2015, International Conference on Advanced Production Management Systems, International Workshop on Open Cloud Computing Architecture for Smart Manufacturing and Cyber Physical Production Systems, September 2015, Tokyo, Japan.

18) Peyman Yazdizadeh, **Farhad Ameri**, A Text Mining Technique for Manufacturing Supplier Classification, ASME IDETC2015-46694, August 2015, Boston, MA.
19) Douglas Eddy, Sundar Krishnamurty, Ian Grosse, Maxwell Perham, Jack Wileden, **Farhad Ameri**. Knowledge Management with an Intelligent Tool for Additive Manufacturing , ASME IDETC2015-46615, August 2015, Boston, MA.
20) Maedeh Dabbaghian Amiri, **Farhad Ameri**, An Agent-based model for supplier selection in Digital Manufacturing Market, The Third World Annual Conference for Industrial and Systems Engineering, October 2014, San Antonio, TX.
21) Chiradeep Sen, Alolika Mukhopadhyay (ST), John Fields, **Farhad Ameri (CO),** A methodology for measuring the information content of design requirements based on their form-neutral representation, ASME IDETC 2014-34438, August 2014, Buffalo, NY.
22) **Farhad Ameri (CO)**, Stan Thornhill (ST), Manufacturing Capability Inference and Supplier Characterization Based on a Formal Thesaurus, APMS 2013 International Conference in Production Management Systems-Sustainable Production and Service Supply Chains, State College, PA, September 2013.
23) **Farhad Ameri (CO)**, Samira Sadeghi(ST), An Intelligent Process Planning System Based on Formal Manufacturing Capability Models, ASME DETC International Design Automation Conference, Portland, OR, August 2013, Paper No. DETC2013-13286.
24) **Farhad Ameri (CO)**, Stephen Allen (ST), An ontological Approach to Integrated Product and Process Knowledge Modeling for Intelligent Design Repositories, The 23rd CIRP Design Conference: Smart Product Engineering, Bochum, Germany, March 2013.
25) **Farhad Ameri (CO)**, Christian McArthur (ST), Colin Urbanovsky (ST), A Systematic Approach to Engineering Knowledge Organization and Modeling, ASME DETC Computers and Information in Engineering (CIE) Conference, Chicago, IL, August 2012, Paper No. DETC2012-71189.
26) **Farhad Ameri (CO)**, Christian McArthur (ST), Colin Urbanovsky (ST), A Systematic Approach to Developing Ontologies for Manufacturing Service Modeling, Ontology and Semantic Web for Manufacturing (OSEMA) workshop, 7th International Conference on Formal Ontology in Information Systems (FOIS 2012), Graz, Austria, July 2012
27) **Farhad Ameri (CO)**, Christian McArthur (ST), Colin Urbanovsky (ST), The metal casting extension of Manufacturing Service Description Language, ASME 11th Biennial Conference on Engineering Systems Design and Analysis, ESDA2012, July 2-4, 2012, Nantes, France, Paper No : ESDA2012 – 82694
28) **Farhad Ameri (CO)**, Christian McArthur (ST), An Agent-based System for Autonomous Configuration of Agile Supply Chains, 4th international conference on Information Systems, Logistics, and Supply Chain (ILS 2012), Quebec, Canada, August 26-29 2012.
29) **Farhad Ameri (CO)**, Christian McArthur (ST), Bahram Asiabanpour (TX), Mohammad Hayasi (ST), A Web-based Framework for Semantic Supplier Discovery for Discrete Part Manufacturing, SME North American Manufacturing Research Conference, Corvallis, OR, June 2011. Paper No: NAMRC39-4774.
30) **Farhad Ameri (CO)**, Christian McArthur (ST), An experimental evaluation of a rule-based approach to manufacturing supplier discovery in virtual environments, ASME DETC

International Design Automation Conference, Washington DC, August 2011, Paper No. DETC2011-47768.

31) **Farhad Ameri (CO)**, Christian McArthur (ST), Knowledge representation for supplier discovery in distributed manufacturing, International Conference on Engineering Design, ICED 2011, Technical University of Denmark, Copenhagen, Denmark, August 2011.
32) **Farhad Ameri (CO)** and Christian McArthur (ST), An Ontological Approach to Manufacturing Supplier Discovery in Virtual Markets ASME Design Engineering Technical Conference, Montreal, Quebec, Canada, August 2010, Paper No. DETC2010-28179.
33) Chiradeep Sen, **Farhad Ameri**, Joshua D. Summers (CO), Entropic Method for Sequencing Discrete Design Decisions, ASME DETC International Design Automation Conference, San Diego, August 2009, Paper No. DETC2009-78600.
34) **Farhad Ameri (CO)**, Joshua D. Summers, FIXON: An Ontology for Representation of Fixture Design Knowledge, submitted to *International CAD Conference and Exhibition*, Orlando, Florida, June 2008.
35) Joshua D. Summers (CO), **Farhad Ameri**. An Algorithm for Assessing Design Complexity Through Connectivity, *International Symposium on Tools and Methods of Competitive Engineering (TMCE)*, Ismir, Turkey, April 2008.
36) Madhu Kayyar, Joshua Summers (CO), **Farhad Ameri**, and Sherill Biggers. A Case Study of SME Design Process and Development of a Design Enabler Tool, ASME DETC 2007, DAC-35496, Las Vegas
37) **Farhad Ameri (CO)**, Deba Dutta, Description Logic for Formal Representation of Manufacturing Resources, *Transactions of North American Manufacturing Research Institute*, University of Michigan, Ann Arbor, May 2007.
38) **Farhad Ameri (CO)**, Deba Dutta. Results of a Survey on Web-Based Approaches to global Outsourcing in the Manufacturing Industry, in *Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering,* Ypsilanti, MI, October 2006.
39) **Farhad Ameri (CO)**, Deba Dutta, An Upper Ontology for Manufacturing Service Description, *ASME DETC 06, 26th Computers and Information in Engineering Conference (CIE),* Philadelphia, Pennsylvania, USA, September 2006.
40) **Farhad Ameri (CO)**, Khurshid Qureshi. Investigating Different Approaches for Front-Loading Problem Solving in Product Development, in *Proceedings of ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference,* Philadelphia, Pennsylvania, USA, September 2006.
41) Nikhil Joshi (CO), **Farhad Ameri** and Deba Dutta. Systematic Decision Support for Engineering Change Management in PLM. In *Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference,* Long Beach, California, USA, September 24-28, 2005.
42) **Farhad Ameri (CO)**, Alireza Tavakoli Bina. NC Tool Path Generation Using Rule Based Feature Recognition for Asymmetric Rotational Components. In *Proceedings of National Conference of Industrial Engineering*, Sharif University of Technology, May 2001.

b. Non-refereed:

None

c. Under Review Refereed Conference Proceedings:
None

4. Abstracts:
None

5. Reports:
NIST/OAGi Workshop: Drilling down on Smart Manufacturing – Enabling Composable Apps, NIST Advanced Manufacturing Series 100-8 , This publication is available free of charge from: https://doi.org/10.6028/NIST.AMS.100-8, April 2017

6. Book Reviews:
None

7. Other:
None

d. Working Refereed Conference Proceedings:

B. Works not in Print

1. Papers Presented at Professional Meetings and Conferences :

- Reference ontology for maintenance management, Industrial Ontology Foundry Workshop, Oslo, Norway, February 2019
- Supplier Clustering Based on Unstructured Manufacturing Capability Data.: 38th Computers and Information in Engineering Conference, ASME- IDETC2018-85865, August 2018, Quebec City
- A Hybrid Method for Manufacturing Text Mining Based on Document Clustering and Topic Modeling Techniques, Advanced Production Management Systems (APMS)- Special Session: Cyber-physical Technology Deployments in Smart Manufacturing System, September 2016, Iguassu Falls, Brazil.
- Digital Factories for Capability Modeling and Visualization, Information Systems, Advanced Production Management Systems (APMS)- Special Session: Cyber-physical Technology Deployments in Smart Manufacturing System, September 2016, Iguassu Falls, Brazil
- A Formal Process for Community-based Reference Model Evolution for Smart Manufacturing Systems, APMS 2015, International Conference on Advanced Production Management Systems, International Workshop on Open Cloud Computing Architecture for Smart Manufacturing and Cyber Physical Production Systems, September 2015, Tokyo, Japan.

- Manufacturing Capability Inference and Supplier Characterization Based on a Formal Thesaurus, APMS 2013 International Conference in Production Management Systems-Sustainable Production and Service Supply Chains, State College, PA, September 2013.
- An Intelligent Process Planning System Based on Formal Manufacturing Capability Models, ASME DETC International Design Automation Conference, Portland, OR, August 2013.
- Manufacturing Capability Inference and Supplier Characterization Based on a Formal Thesaurus, APMS 2013 International Conference in Production Management Systems-Sustainable Production and Service Supply Chains, State College, PA, September 2013.
- An ontological Approach to Integrated Product and Process Knowledge Modeling for Intelligent Design Repositories, The 23rd CIRP Design Conference: Smart Product Engineering, Bochum, Germany, March 2013.
- A Systematic Approach to Knowledge Organization and Modeling, ASME DETC2012, Chicago, August 2012.
- An experimental evaluation of a rule-based approach to manufacturing supplier discovery in virtual environments, ASME DETC International Design Automation Conference, Washington DC, August 2011, Paper No. DETC2011-47768
- A Web-based Framework for Semantic Supplier Discovery for Discrete Part Manufacturing, SME North American Manufacturing Research Conference, Corvallis, OR, June 2011.
- An Algorithm for Assessing Design Complexity Through Connectivity,International Symposium on Tools and Methods of Competitive Engineering (TMCE), Izmir, Turkty, April 2008.
- A Case Study of SME Design Process and Development of a Design Enabler Tool Development, presented at ASME International Design engineering Technical Conferences, Las Vegas, Nevada, September 2007.
- Systematic Decision Support for Engineering Change Management in PLM, presented at ASME Computers and Information in Engineering Conference, Long Beach, California, September 2005.
- Investigating Different Approaches for Front-Loading Problem Solving in Product Development, presented at ASME International Design Engineering Technical Conferences, Philadelphia, Pennsylvania, September 2006.
- An Upper Ontology for Manufacturing Service Description, presented at ASME Computers and Information in Engineering Conference, Philadelphia, Pennsylvania, September 2006.
- The IT Infrastructure for Virtual Manufacturing in Distributed Environments, presented at First Graduate Student Symposium, College of Engineering, The University of Michigan, Ann Arbor, October 2004.
- NC Tool Path Generation Using Rule Based Feature Recognition for Asymmetric Rotational Components, presented at National Conference of Industrial Engineering, Sharif University of Technology, May 2001.

- Integration of Design and Manufacturing Through Automatic Generation of NC codes from B-Rep Models, presented at Iran's Computer Society, Beheshti University, Tehran, September 2000.

2. Invited Talks, Lectures, and Presentations:

- A Thesaurus-Guided Method for Smart Manufacturing Diagnostics, NIST Standards Requirements Workshop for Natural Language Analysis, Gaithersburg MD, May 2019.
- Supply chain Ontologies: State-of-the-art, Industrial Ontology Foundry Workshop, Oslo, Norway, February 2019
- An overview of the supply chain working group activities and accomplishments, Industrial Ontology Foundry Workshop, Oslo, Norway, February 2019
- **Keynote Speaker**, Workshop on Modeling Capabilities Using Ontologies, University at Buffalo, April 2018.
- Second NIST workshop on Industry Ontology Foundry (IOF), Gaithersburg MD, April 2017.
- First NIST workshop on Industry Ontology Foundry (IOF), Gaithersburg MD, December 2016
- NIST workshop on crowdsourcing for knowledge modeling, Gaithersburg, MD, April 2016
- Smart Manufacturing: Trends, Challenges, Enablers, International Management conference, Tehran, Iran , January 2015
- Smart Manufacturing, University of Oklahoma, Department of Industrial and Systems Engineering, Mach 2014
- Manufacturing Service Modeling, NIST technical workshop on Models of Manufacturing Services for enhanced Manufacturing Sourcing, Manufacturing Engineering Lab, Systems Integration Division, Gaithersburg, MD April 2012.
- Collaborative Service Modeling , NIST technical workshop on Models of Manufacturing Services for enhanced Manufacturing Sourcing, Manufacturing Engineering Lab, Systems Integration Division, Gaithersburg, MD April 2012.
- Semantic Services for Supply Chain Deployment, National Institute of Standards and Technology (NIST)- Manufacturing Engineering Lab, Gaithersburg, MD, June 2011.
- Ontology-based Supplier Discovery, National Institute of Standards and Technology (NIST)- Manufacturing Engineering Lab, Gaithersburg, MD, May 2010.
- Multi-Agent based System for Digital Manufacturing Market, Presented at: School of Mechanical, Industrial and Manufacturing Engineering, Corvallis, OR, January 2009.
- Agent-based Technology in Intelligent Manufacturing Systems, Department of Computer Science, Texas State University, September 2009.
- Introduction to Digital Manufacturing Market, presented at Systems Realization Laboratory, Woodruf School of Engineering, Georgia Institute of Technology, Atlanta, Georgia, November 2006.

- Multi-Agent Based System for Digital Manufacturing Market, presented at Department of Mechanical Engineering, Clemson University, South Carolina, November 2006.
- Product Lifecycle Management: 21st Century Paradigm of Product Development, presented at Bradley University, Peoria, Illinois, April 2006.

3. Consultancies:
   None

4. Workshops:
   None

5. Other:
   None

C. Grants and Contracts

1. Funded External Grants and Contracts:

- **NIST Award:** Project Title: "A Hybrid Approach for Developing, Extending, and Implementing Industrial Maintenance Knowledge Graphs and Semantic Ontologies to Support Smart Maintenance Diagnostics", National Institute of Standard and Technology (NIST), Engineering Laboratory Grants Program, Award Amount: $50,235, Award Period: 10/2020-9/2021 (Sole PI: Farhad Ameri). Award #70NANB20H201.
- **NIST Award:** Project Title: "Ontology Modeling and Data Integration for Agri-Food Supply Chain Traceability (Phase II)", National Institute of Standard and Technology (NIST), Measurement Engineering and Science (MES) Grants Program, Award Amount: $76,727, Award Period: 10/2020-9/2021 (Sole PI: Farhad Ameri). Award #70NANB20H195.
- **NIST Award:** Proposal Title: "Ontology Modeling and Data Integration for Agri-Food Supply Chain Traceability", National Institute of Standard and Technology (NIST), Measurement Engineering and Science (MES) Grants Program, Award Amount: $87,272, Award Period: 10/2019-12/2020 (Sole PI: Farhad Ameri). Award #70NANB19H093.
- **Terex Corporation Grant:,** Award Title: demand perdition for construction equipment using machine learning techniques. $3,490, September 2018- April 2019
- **SBIR Award**: Phase II- Additive Manufacturing Advisory System, In response to SBIR AF141-213 entitled "Method for Evaluating Candidates for Additive Manufacturing (AM) Processes",Imaginestics LLC (PI), Texas State University (Co-PI), America Makes (Co-PI), University of Cincinnati (Co-PI) . Award Amount (Texas State Share): $25,000, Award Period: 10/2017-6/2019.

- **DMDII Grant**: Digital Manufacturing and Design Innovation Institute. Award Title: Ontological Approach to Manufacturing Capability Modeling and Quantification" Project Title: Capability Modeling for Digital Factories (CaMDiF), Co-PI: UIUC , Award Amount: $147,208 (Texas State Share: $51,942), Award Period: 1/2017-1/2018, Technical Lead: Farhad Ameri
- **NIST Award:** Award Title: "A methodology for collaborative ontology development for service-oriented manufacturing enterprises", National Institute of Standard and Technology (NIST), Engineering Laboratory Grants Program, Award Amount: $235,913, Award Period: 10/2014-/2018 (Sole PI: Farhad Ameri).
- **SBIR Award**: Phase I- Additive Manufacturing Advisory System, In response to US AF141-213 entitled "Method for Evaluating Candidates for Additive Manufacturing (AM) Processes",Imaginestics LLC (PI), Texas State University (Co-PI), GE Aviation Additive Development Center (Co-PI). Award Amount: $7,500, Award Period: 9/2014-6/2015.
- **NSF Award:** Award Title: "Collaborative Research: Measuring the information contents of design artifacts in early design"(Farhad Ameri (PI), Chiradeep Sen (CO-PI)), Source of Support: National Science Foundation (NSF): Engineering and Systems Design, Award No: CMMI-1334259, Total award amount:$270,031 – Texas State's Share: $139,031 , Award Period: 9/13-8/16
- **AFRL Award:** Imaginestics LLC (PI), Farhad Ameri (CO-PI), AFRL, BAA-12-01-PKM Connecting American Manufacturing, Starting April 2012, Amount: $30,000. Project Duration: 1 year.
- **NIST Award:** Proposal Title: "Semantic Supplier Discovery", National Institute of Standard and Technology (NIST), Manufacturing Engineering Lab (MEL), Measurement Science and Engineering Research Grants Program , Funded June 2011, Amount: $51,353, Project Duration: 1 year.
- NSF travel support for graduate student attending North American Manufacturing Research Conference (NAMRC), April 2011, $400.

3. Pending External Grants and Contracts:

- NSF Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM), Facilitating Graduate Student Success through Mentoring, Cohort Identity, and Scholarships, Total Award Amount: $650,000, Total Award Period Covered: 01/20/2020 – 01/19/2025

4. Submitted, but not Funded, External Grants and Contracts:

- NSF Proposal: Proposal Title: "*Collaborative Research: Cloud-based Architecture Supporting Cybermanufacturing Services for SMEs*" Farhad Ameri (PI), Mina Guirguis

(CO-PI)), Submitted to the Cybermanufacturing Program, Project Budget:$273,031, Performance Period: 1/17-12/19

- NSF PFI:BIC**:** Proposal Title: "Collaborative Research: Smart collaborative service breeding environment for human-robot interaction", Farhad Ameri (CO-PI), Thorsten Wuest, West Virginia University (PI), project budget: $975,371, Performance Period:9/16-8/19.
- SBIR Phase I: AF173-010*,* An Ontology-driven Framework for PLM Capability and Cost Analysis, Industry Partner: ITAMCO, submitted April 207.
- Ameri, Farhad (PI), "Manufacturing Service Modeling for Enhanced Outsourcing", National Institute of Standard and Technology (NIST), Systems Integration Division, Measurement Science and Engineering Research Grants Program , Submitted April 2012, Amount: $58,940, Project Duration: 1 year.
- Farhad Ameri (PI), NSF OISE: Planning Visit: Establishing a new collaborative research with Technical University of Munich in the context of the Cognitive Machine Shop Project, September 2011, (PI,- $17, 850).
- Farhad Ameri (PI), NSF CAREER Proposal: Formal Capability Modeling for Autonomous Factory Configuration, July 2010, ($400,000).
- DARPA-BAA-11-47, Collaborative Proposal, Technical Area 3: Manufacturing Model library, August 2011, (Farhad Ameri, Co-PI: $ 184,000)
- DARPA-BAA-11-47, Collaborative Proposal, Technical Area 4: Model Library Curation and Semantic Support, August 2011, (Farhad Ameri, Co-PI: $ 46,000)
- DARPA-BAA-11-20, Collaborative Proposal, Instant Foundry Adaptive through Bits (iFAB) Technical Area # Two: Manufacturing Capability and Process Model Library, April 2011, (Farhad Ameri, Co-PI: $ 2,400,000)
- U.S Air Force, Collaborative Proposal, Solicitation Number: RFI-11-07-PKM: Advanced Manufacturing Enterprise (AME) Next Generation Supplier Discovery, January 2011, (Farhad Ameri, Co-PI: $100,000).
- Submitted to General Motors: Optimizing Tools for Planning Automotive Assembly Body , May 2010 (Farhad Ameri, Co-PI $50,000).
- TX DOT: Evaluation of TxDOT Traffic Forecasting Techniques, March 2010 (Farhad Ameri, Co-PI $170,707).
- NSF Proposal: Semantic Search Techniques for Supplier Discovery in Virtual Environments, September 2010 (Farhad Ameri, PI – $202,054) .
- NSF Proposal: Digital Manufacturing Market: An Ontological Approach to Supply Chain Deployment in Distributed Environments, February 2010, (Farhad Ameri, PI - $260,127).
- NSF Proposal: (Collaborative Research) Supporting Digital Design and Manufacturing Enterprises: Enabling Fixture Work Order and Specification Reuse through Representations and Algorithms, February 2009 (Farhad Ameri, Co-PI - $129,860).
- NSF Proposal: Supporting Digital Design and Manufacturing Enterprises: Enabling Fixture Work Order and Specification Reuse through Representations and Algorithms, February 2008, (Farhad Ameri, Co-PI - $280,000)

5. Funded Internal Grants and Contracts:

- International Research Accelerator (IRA), Smart Data for Autonomous and Connected Cargo Containers, Amount: $14,500, Award Period: May 2019-June 2020.
- Technology Enhanced Analysis of Material, Material with Intelligence (MWI) Research Initiative (Technology Enhanced Analysis of Material), $10,000, Award Period: May 2019-April 2020
- REP Grant, An Intelligent System for Maintenance Diagnosis based on Semantic Knowledge Graph and Bayesian Network, $7800, February 2018
- RDF grant, Supplementary to NIST research grant , $8000, July 2012.

6. Pending Internal Grants

7. Submitted, but not funded, Internal Grants and Contracts

- REP: Intelligent Manufacturing Model Library, October 2012, (Farhad Ameri, PI: $8,000).
- MIRG Proposal: Novel high temperature bonding method for fabrication of multilayer steel parts with the goal of improving mechanical properties, February 2013, (Farhad Ameri, Co-PI, $25,000)
- REP: Intelligent Manufacturing Model Library, October 2011, (Farhad Ameri, PI: $8,000).
- REP: Semantic search algorithms for supplier discovery in virtual environments, October 2010, (Farhad Ameri ,PI: $8,000).
- REP : Manufacturing capability modeling for autonomous process planning in cognitive factory, October 2009, (Farhad Ameri , PI: $8,000).
- One-time Research Support: Agent-based technology for agile supply chain deployment, November 2009 (Farhad Ameri , PI: $30,000).

Research Honors and Awards:

- College of Science and Engineering Achievement Award for Excellence in Scholarly/Creative Activities, 2015 .
- Presidential Research Award for Developmental Leave, Spring 2018.

IV. SERVICE

A. University:

- Advisory Committee Member, BS in Mechanical Engineering Proposal Committee, Ingram School of Engineering (2020)

- Digital Manufacturing and Design Innovation Institute (DMDII) Technical point-of-contact (2014-2018)
    - Initiated and managed the membership process. Texas State University is officially a DMDII member since 2014.
    - Prepared cost share reports
- College of Science and Engineering, Curriculum Committee Member, (2016-present)
    - Attending college curriculum committee meeting 2-3 times per academic year
    - Reviewing course changes submitted by various departments in the College of Science and Engineering
    - Reviewing program changes submitted by various departments in the College of Science and Engineering
- College of Science and Engineering, Scholarship Committee Member, (2011-2017)
    - Reviewing applications for the following scholarships:
        - Outstanding Graduate Student Scholarship
        - Outstanding Undergraduate Student Scholarship
        - University Scholars
        - Durrenbrger Scholarship
        - Denison Koehn Scholarship
        - Muir Scholarship
        - Presidential upper level Scholarship
        - Coker Scholarship
        - Smith Williams Scholarship
- Grant Writing Program, College of Science and Engineering, Reviewer, December 2018
    - Reviewed 9 project abstracts submitted by PIs from various departments
- NSF Proposal Writing Panelist, Hands-on proposal writing workshop, January 2016
- Texas State Graduate Research Conference, Judge, November 2011, November 2013.
- H-LSAMP Student Mentor
    - Alexandria Williams, Fall 2011
    - James Warren, Fall 2012, spring 2013-2014
    - Cassie Krapfl, 2014-2017
- College of Science and Engineering Search Committee Member, Contract Machinist position, Fall 2011
- Serving as Graduate Faculty (2009 – present)
- Attending annual graduation commencement ceremonies (2009 – present)
- Attending the University Bobcat Day (November 2009-present)
- Attending Homecoming Tailgating (2009 - present)

B. Departmental:

- Graduate Advisor, Engineering Management Program (2019-present)
- Program Director, Engineering Technology Program (2018-present)
    - Preparing SACS reports
    - ET Curriculum development and planning
    - Running ET faculty meetings

    - Organizing ET IAB meetings
- Chair, Departmental Curriculum Committee (2015-present)
- ABET coordinator and point-of-contact, 2017-presnet
    - Submitted Readiness Review Reports in September 2018
    - Designed and implemented continuous improvement process
    - Designed and implemented outcome assessment methods and rubrics (templates, procedures, and guidelines)
    - Designed and implemented student-self-evaluation methods and templates
    - Designed and implemented graduating student survey forms and methods
- Department Representative at University Curriculum Committee (2014-present)
- Interim FEF Key Professor (2016-2017 and 2018-2019 academic years)
    - Preparing FEF reaccreditation reports and organizing the on-site visit:
        - Resulted in reaccreditation of the metal casting program for another 5 years
    - Submitting a proposal to AIST for a grant supporting Steel Industry Day (Funded $3,179, April 2017)
    - Selecting CIC student delegates
    - Attending CIC conference in Boston (November 2016 and November 2018)
    - Two CIC scholarships awarded two Texas State students
        - Matt Candelas, $2000, 2018
        - Eunice Solis, $2000, 2016
    - Co-advising AFS student organization
    - Managing FEF funds ($9,500 per academic year)
    - Organizing metal casting IAB meetings
- Chair, Faculty Search Committee, FEF professor position 2018-2019
- Chair, Faculty Search Committee, FEF professor position 2016-2017
- Member, Faculty search committee, Advanced Manufacturing Position, 2017-2018
- Co-chair ,Departmental Curriculum Committee, (2011-2014)
- Co-chair ,Departmental Scholarship Committee,(2010- 2017)
- Member , Graduate Program Committee (2009 – present)
- Member , Department Website Committee (2010 – present)
- Member, Department Personnel Committee (2015-present)
- Member, Faculty Search Committee for Assistant Professor Position in the Ingram School of Engineering, Spring 2014
- Member, Faculty Search Committee for Assistant Professor Position in Metal Casting, Spring 2012
- Undergraduate Advisor, ET Program (2009 – present)
- Co-advisor , Society of Manufacturing Engineers (SME) student chapter, (2010 – present)
- Co-advisor, American Foundry Society (2016-2017 and 2018-2019 academic years)
- Society of Automotive Engineers (SAE), Formula one Project, Co-Advisor (2011)

M.S Student advisees:

- Kimia Zandbiglari, 2020-present
- Ali Ghanbari, 2017-2019

- Ramin Sabbagh 2015-2017
- Peyman Yazdizadeh 2014-2016
- Alolika Mukhopadhyay 2014-2016
- Mina Amini 2012-2014
- Maedeh Dabaghain Amiri 2012-2014
- Garrett Rodgers 2012-2014
- Hayden beauchamp 2011-2013
- Colin Urbanovski 2010-2012
- Christian MacArthur2009-2011

C. Community:

- Discover Texas State , September 2012
- Harmony School of Excellence, Since Fair Judge, Natural Sciences, December 2011
- High School Tour of Department, April 2011
- Texas Academy of Science Meetings, Technical judge, St. Edwards University, Austin, TX, March 2011.
- Capital BEST Robotic competition, Akins High School, Technical Judge, December 2010

D. Professional:

Professional Society Membership:

- Member, American Society of Mechanical Engineers (ASME) (2004-present)
- Member, Society of Manufacturing Engineers (SME) (2004-present)
- Full Member, International Federation for Information Processing (IFIP) Working Group 5.7, Advances in Production Management Systems (APMS) (2015-present)

Technical Committee Membership:

- Technical Oversight Board Member, Industrial Ontology Foundry (IOF), (2017-present)
- TC Chair, ASME Systems Engineering, Information and Knowledge management (SEIKM) technical committee (2014-2015).
- TC Program Chair, ASME Systems Engineering, Information and Knowledge management (SEIKM) technical committee (2013-2014).
- TC Secretary, ASME Systems Engineering, Information and Knowledge management (SEIKM) technical committee (2012-2013).

Journal Paper Reviewer:

- Computers in Industry (2018-present)
- Artificial Intelligence in Design Engineering and Manufacturing, AIDEAM (2016-present)
- CIRP Journal of Manufacturing Science and Technology (2015-present)

- International Journal of Product Lifecycle Management (2014-2015)
- Journal of Manufacturing Systems (2013-2017)
- Journal of Research in Engineering Design (2013-2015)
- Journal of Intelligent Manufacturing (2013-present)
- ASME Journal of Computing and Information Systems in Eng. (JCISE) (2013-present)
- ASME Journal of Mechanical Design (JMD) (2014)
- ASME Journal of Manufacturing Science and Engineering (2016-present)
- International Journal of Computer Integrated Manufacturing (IJCIM) (2013)
- Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AI EDAM) (2013, 2015)
- IEEE Transactions on Industrial Informatics (2010)
- American Journal of Engineering Education (2010)
- Journal of Production Planning & Control (2010)
- Structural and Multidisciplinary Optimization (2011)

Conference Paper Reviewer:

- IEEE Conference on Big Data, 2017
- APMS, (2013-present)
- ASME IDETC/ SEIKM, *review coordinator* (2008- present)
- ASME IDETC/CIE (2008- present)
- IEEE International Conference on Intelligent Robots and Systems (IROS)-(2012)
- IEEE International Conference on Robotics and Automation (ICRA)-(2012)
- North American Manufacturing Research Conference (NAMRC)- (2012-2016)

NSF Proposal Reviewer (by invitation):

- NSF Proposal Review Panelist, CMMI Engineering Design and Systems Engineering Program, January 2018, Arlington VA.
- NSF Proposal Review Panelist, CMMI Engineering Design and Systems Engineering Program, January 2016, Arlington VA.
- NSF Proposal Review Panelist, CMMI Service Enterprise Systems Program, May 2012, Arlington VA.

Conference/Workshop Organization:

- Conference Advisory Committee Member, Advanced in Production Management Systems (APMS 2020), Novi Sad, Serbia, September 2020
- Symposium Organizer and session chair, ASME-IDETC/CIE conference, Systems Engineering and Smart Manufacturing Informatics, St. Louis, MO, August 2020.
- Conference General Chair, Advances in Production Management Systems (APMS 2019), Austin, TX, September 2019.
- Program Committee Member, Formal Ontology Meets Industry (FOMI) Workshop, Graz, Austria, September 23-25, 2019.

- Symposium Organizer and session chair, ASME-IDETC/CIE conference, Smart Manufacturing Informatics, Anaheim, CA, August 2019.
- Program Committee Member, 10th Formal Ontology meets Industry (FOMI) workshop, Joint Ontology Workshops (JOWO 2019), Graz, Austria, September 23-25, 2019.
- Symposium Organizer and session chair, ASME-IDETC/CIE conference, Smart Manufacturing Informatics, Quebec City, Canada, August 2018.
- Special Session Organizer, Industrial Ontologies Foundry, APMS 2018, Seoul, South Korea.
- Official Judge, Data-Driven X for the lifecycle, Poster Competition, 2017 ASME International Design Engineering Technical Conference, Cleveland, OH, August 6-9.
- Workshop Organizer, Smart Manufacturing and Cyber-physical Production Systems: Intelligent Diagnostics and Maintenance Solutions for Smart Manufacturing, an SM & CPPS SIG workshop session, Advanced Production Management Systems (APMS) Conference, Hamburg, Germany, September 2017.
- Symposium Organizer, ASME-IDETC/CIE conference, Smart Manufacturing Informatics, Cleveland, OH, August 2017.
- Session Organizer, Bottom-up knowledge base Development for Smart Manufacturing, Advanced Production Management Systems (APMS) Conference, Brazil, September 2016.
- Conference Co-Chair, Product Lifecycle Management Conference, University of South Carolina, Columbia, July 2016.

- Session Co-Chair, ASME-IDETC/CIE conference, Session: Systems Engineering, Charlotte, NC, August 2016.
- Session Co-Chair, ASME-IDETC/CIE conference, Session: Design Informatics, Charlotte, NC, August 2016.
- Session Co-Chair, ASME-IDETC/CIE conference, Session: Smart Manufacturing Informatics, Charlotte, NC, August 2016.
- Session Chair, Crowdsourcing for Manufacturing Knowledge, NIST/OAGi Workshop on Smart Manufacturing (SM) and Cyber-Physical Production Systems (CPPS) – Towards Composable Manufacturing Systems, Gaithersburg, MD, April 2016.
- Panel organizer and moderator, ASME-IDETC/CIE conference, Panel Title: Research Trends and Challenges in Systems Engineering, Boston, MA, August 2015.
- Session organizer and Chair, ASME-IDETC/CIE conference, Session: Systems Engineering, Knowledge, and Information Management, Boston, MA, August 2015.
- Session organizer and Co-Chair, ASME-IDETC/CIE conference, Session: Smart Manufacturing Informatics, Boston, MA, August 2015.
- Special session co-organizer, International Workshop on Open Cloud Computing Architecture for Smart Manufacturing and Cyber Physical Production Systems, Advanced Production Management Systems (APMS) 2015 international conference, September 5-9 , Tokyo, Japan

- Special session co-organizer, Smart Manufacturing System Architecture, Advanced Production Management Systems (APMS) 2014 international conference, September 20-24, Ajaccio, France
- Special session co-organizer, Sustainable Production and Service Supply Chains , Advanced Production Management Systems (APMS) 2013 international conference, September 9-12 , State College, PA
- ASME CIE special session organizer and review coordinator, San Diego, CA (2009)

NSF Workshop Participation (Participation by invitation only):

- NSF Workshop on Engineering Design and Systems Engineering Foundations, November 14-17, 2015, Clemson University, Clemson, SC
- NSF Workshop on Mechanical Engineering Design Knowledge, Atlanta, GA (2011)

NIST Workshop Participation (Participation by invitation only):

- Industrial Ontology Foundry (third), Buffalo, NY, June 2018
- NIST Workshop (second) in Industrial Ontology Foundry, Gaithersburg, MD , April 2017
- NIST Workshop in Industrial Ontology Foundry, Gaithersburg, MD , December 2016
- NIST Workshop on Smart Manufacturing systems, Session Chair: Bottom-up knowledge and information modeling for Smart Manufacturing systems Gaithersburg, MD (April 2016)
- NIST Workshop on Smart Manufacturing, Gaithersburg, MD (November 2014)

Other Workshops (Participation by invitation only):

- Capability Modeling using Ontologies, Keynote speaker, April 2018, University at Buffalo, NY

Editorial Board Memberships:

- **Guest Editor**, Elsevier Journal of Robotics and Computer-Integrated Manufacturing, Special Issue on Semantic Artificial Intelligence for Smart Manufacturing Automation (2020-2021)

Services Honors and Awards:

- College of Science and Engineering Achievement Award for Excellence in Service, 2019 .

- ASME Award for session organization and review coordination, (DETC/CIE conference), August 2010, Montreal , Canada.

- ASME Award for session organization and review coordination, (DETC/CIE conference), September 2009, San Diego, CA .

Services Grants/Gifts:

- **AIST Grant:** Association for Iron & Steel Technology, Supporting Steel Industry Day – $3,179, April 2017
- **APMS 2019 Conference Sponsorship:**
    - $1000,Texas State University- College of Science and Engineering
    - $2000, Alpha Nudos, Austin Texas
    - $1000, University of Texas at Dallas - Naveen Jindal School of Management
    - $1000, PennState Service Enterprise Engineering