TEXAS STATE VITA

I. Academic/Professional Background

A. Name and Title

Name: Dr. Jelena Tesic Title: Assistant Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PHD	2004	Univ of California, Santa Barbara	Electrical and Computer Engineering	
MS	1999	Univ of California, Santa Barbara	Electrical and Computer Engineering	

C. University Experience

Position	*University*	*Dates*
Guest lecturer	University of California Santa Barbara	2014
Graduate Teaching Assistant	University of California Santa Barbara	September 1998 - June 2001

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Assistant Professor	Computer Science, Texas State University, San Marcos, TX	August 18, 2017 - December 31, 2021
Senior Research Scientist	Mayachitra, Inc.	March 2009 - August 2017
Research Staff Member	IBM T.J. Watson Research Center	May 2004 - February 2009

II. TEACHING

A. Teaching Honors and Awards:

Award / Honor Recipient: Outstanding Teaching Assistant Award, ECE department, UC Santa Barbara.

June 1999

B. Courses Taught:

Texas State University:

CS 3354 - OBJ-ORTD DSG & PRG

CS 3354 - OBJECT-ORIENTED DESIGN & PRG

CS 4347 - INTRO TO MACHINE LEARNING

CS 4395 - INDEPENDENT STUDY

CS 5369L - MACH LRNG & APPLTN

CS 5395 - IND STUDY ADV

CS 5399A - THESIS

CS 5399B - THESIS

CS 7311 - DATA DRIVEN COMP METH & INFRA

CS 7311 - DATA DRVN CMP METH

CS 7387 - RESEARCH IN COMPUTER SCIENCE

Other:

Advanced Digital Signal Processing

Advanced Topics in Computer Vision

Digital Signal Processing

Introduction to Computer Vision

Neural Networks

Signal Analysis and Processing

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

Supervisor / Chair, Applied Research Project, "Feature Extraction using Scalable Balancing Approach", Status: In Progress. (August 18, 2020 - December 15, 2021). Computer Science, Texas State University.
Student(s): Blane Rhodes, Undergraduate, B.Sc.

Supervisor / Chair, Applied Research Project, "Surveys as Attitudinal Network Graphs: Frustration Cloud Approach for Fair Assessment", Status: In Progress. (June 1, 2020 - May 31, 2021). Computer Science, Texas State University.
Student(s): Maria Tomasso, Graduate, Ph.D.

Supervisor / Chair, Independent Study, "Community Discovery in Attitudinal Networks", Status: In Progress. (January 19, 2021 - May 15, 2021). Computer Science, Texas State University.
Student(s): Maria Tomasso, Graduate, Ph.D.

Supervisor / Chair, Applied Research Project, "Scaling graph Balancing on Cluster", Status: Completed. (June 1, 2020 - December 15, 2020). Computer Science, Texas State University.
Student(s): Eric Hull, Undergraduate, B.Sc.

Supervisor / Chair, Applied Research Project, "Social Media Analysis of #MeToo Movement", Status: Completed. (May 15, 2020 - December 15, 2020). Computer Science, Texas State University.
Student(s): Mirna Elizondo, Undergraduate, B.Sc.

Member, Candidacy Exam, "Estimating the Potential for Edge Computing Using Instruction Based Dynamic Analysis", Status: Completed. (January 15, 2020 - December 15, 2020). Computer Science, Texas State University.
Student(s): Blake Ford, Graduate, Ph.D.

Supervisor / Chair, Applied Research Project, "Activity Recognition in Maritime Videos", Status: Completed. (September 20, 2019 - December 15, 2020). Computer Science, Texas State University.
Student(s): Alan Turner, Graduate, Master.
Diego Pelayo-Santana, Undergraduate, B.Sc.

Supervisor / Chair, Master's Thesis, "Social Network Analysis At Scale: Graph-based Analysis of Twitter Trends and Communities", Status: Completed. (January 15, 2019 - December 15, 2020). Computer Science, Texas State University.
Student(s): Lia Nogueira De Moura, Graduate, M.Sc.

Supervisor / Chair, Applied Research Project, "Detecting Diagnostics Bias Via Social Network Analysis", Status: Completed. (August 20, 2019 - May 31, 2020). Computer Science, Texas State University.
Student(s): Maria Tomasso, Graduate, Master.
Eric Hull, Undergraduate, B.Sc.
Benjamin Bond, Undergraduate, B.Sc.

Supervisor / Chair, Applied Research Project, "Automated Bot identification in Twitter Communities", Status: Completed. (January 15, 2020 - May 15, 2020). Computer Science, Texas State University.
Student(s): James Steckler, Undergraduate, B.Sc.

Supervisor / Chair, Applied Research Project, "Computing with Words in Maritime Piracy and Attack Detection Systems", Status: Completed. (January 15, 2020 - May 15, 2020). Computer Science, Texas State University.
Student(s): Sreevarsha Challapalli, Graduate, M.Sc.

Member, Master's Thesis, "Performance of Delta Huffman Compression Variants", Status: Completed. (January 15, 2020 - May 15, 2020). Computer Science, Texas State University.
Student(s): Bryant Aaron, Graduate, M.Sc.

Supervisor / Chair, Project, "APPLICATION OF DATA AUGMENTATION TO FALL DETECTION", Status: Completed. (August 20, 2019 - January 15, 2020). Computer Science, Texas State University.
Student(s): Bhavya Medishetty, Graduate, Ph.D.

Supervisor / Chair, Applied Research Project, "Fluorescence Excitation Emission Spectroscopy and Machine Learning for Diagnostics", Status: Completed. (August 20, 2019 - December 14, 2019). Computer Science, Texas State University.
Student(s): Mahya Saeednejad, Graduate, Master.

Supervisor / Chair, Independent Study, "Face Account Classification Using Active Learning", Status: Completed. (August 20, 2019 - December 14, 2019). Computer Science, Texas State University.
Student(s): Taylor Robbins, Undergraduate.

Supervisor / Chair, Applied Research Project, "Identifying Maritime Vessels at Multiple Levels of Descriptions using Deep Features", Status: Completed. (January 1, 2019 - December 14, 2019). Computer Science, Texas State.
Student(s): David Heyse, Undergraduate.

Supervisor / Chair, Applied Research Project, "Deep Learning for Multiple Levels of Description", Status: Completed. (August 22, 2018 - December 14, 2019). Computer Science, Texas State.
Student(s): Nicholas Warren.

Supervisor / Chair, Independent Study, "Data Integration for Hematologic Malignancy Cancer Analysis", Status: Completed. (May 15, 2019 - August 19, 2019). Computer Science, Texas State.
Student(s): Hanie Samimi, Doctoral, Ph.D.

Supervisor / Chair, Independent Study, "Twitter #MeToo Exploratory Data Analysis Pipeline", Status: Completed. (May 15, 2019 - August 19, 2019). Computer Science, Texas State University.
Student(s): Lia Nogueira De Moura, Graduate, Master.

Supervisor / Chair, Project, "Identifying Structures in Aerial Overhead Imagery with Deep Learning", Status: Completed. (June 2, 2019 - August 9, 2019). Computer Science, Texas State University.

Student(s): Constance Xu, Undergraduate.
Brent Redmon, Undergraduate.

Supervisor / Chair, Project, "be Analyzing Bias in Sentiment/Promotional Networks", Status: Completed. (June 10, 2019 - July 19, 2019). Computer Science, Texas State University.
Student(s): Rachel Laing, Undergraduate, B.Sc.

Member, Master's Thesis, "A Markov Game Model for Securing CPS using Reinforcement Learning", Status: Completed. (November 6, 2017 - July 9, 2019). Computer Science, Texas State University.
Student(s): Alireza Tahsini, Graduate, Master.

Supervisor / Chair, Honor's Thesis, "Using Machine Learning to Predict Student Performance", Status: Completed. (January 1, 2019 - May 15, 2019). Computer Science, Texas State University.
Student(s): Nikhita Jayaprakash, Undergraduate, B.Sc.

Supervisor / Chair, Applied Research Project, "Deep Learning for Identification of Structural Changes in Geo located Overhead Imagery", Status: Completed. (January 14, 2019 - May 14, 2019). Computer Science, Texas State University.
Student(s): Brent Redmon, Undergraduate.
Daniel Le, Undergraduate.

Supervisor / Chair, Applied Research Project, "Research and Development of Image and Text Analysis Tools for Automatic Social Media Content Classification", Status: Completed. (January 1, 2019 - May 14, 2019). Computer Science, Texas State University.
Student(s): Joshua Lambert, Graduate, Master.
Elliott Esponda Garcia, Undergraduate, B.Sc.
James Knepper, Undergraduate, B.Sc.
Brent Redmon, Undergraduate, B.Sc.

Member, Master's Thesis, "Game-Theoretic Cyber-Alert Assignment via Deep Nash Q-Learning", Status: Completed. (August 10, 2018 - April 8, 2019). Computer Science, Texas State University.
Student(s): Noah Dunstatter, Graduate, Master.

Supervisor / Chair, Project, "Spread of English Neologisms through Brazilian Portuguese Online Chatter, A Data Science Perspective", Status: Completed. (September 1, 2018 - March 29, 2019). Computer Science, Texas State University.
Student(s): Lia Nogueira De Moura, Graduate, Master.

Member, Master's Thesis, "Detect Interesting Events in Bio-signals using Machine Learning", Status: Completed. (January 21, 2018 - December 14, 2018). Computer Science, Texas State University.
Student(s): Priyank Trivedi, Graduate, Master.

Supervisor / Chair, Applied Research Project, "A "compare and contrast" of semantic techniques for labeling a data set", Status: In Progress. (October 1, 2018 - December 13, 2018). Computer Science, Texas State University.
Student(s): Matthew Trippy, Doctoral.

Supervisor / Chair, Project, "Maritime Asset Protection Using Deep Learning", Status: Completed. (June 1, 2018 - August 21, 2018). Computer Science, Texas State.
Student(s): Warren Nicholas, Undergraduate.

D. Courses Prepared and Curriculum Development:

Advanced Topics in Computer Vision, Curriculum Development, Graduate Class Project: 2014.

CS 7311 Data-Driven Computational Methods and Infrastructure, Curriculum Development, Texa State University. Proposed: August 2018 - December 2021.

CS 3354 Object Oriented Programming and Design, Curriculum Development, Texas State. Approved: January 2019 - December 2020.

F. Other:

Course Coordinator, Texas State. San Marcos. (January 22, 2019 - May 31, 2021).

Guest Lecture, NSF REU Orientation, NSF. San Marcos, United States. 25. (June 2, 2020).

Guest Lecture, UniSTEP, Faculty Development, Texas State. San Marcos, TX. 60. (February 28, 2020).

Student Accomplishments:

Exhibition:

Mentor, SxSW Innovation Lab Finalists. "Bias in Social Network Analysis," SxSW Innovation Lab, Texas State University. Status: Completed. (February 18, 2020). Computer Science, Texas State University.
Student(s): Maria Tomasso, Graduate, Ph.D.
Eric Hull, Undergraduate, B.Sc.

Performance:

Mentor, 2nd place in benchmark Task. "Fake News Track Submission," MediEval 2020 Benchmark, Virtual. Status: Completed. (November 30, 2020). Computer Science, Texas State University.
Student(s): Andrew Magill, Graduate, M.Sc.
Maria Tomasso, Graduate, Ph.D.
Lia Nogueira, Graduate, M.Sc.
Mirna Elizondo, Undergraduate, B.Sc.

Presentation:

Mentor, Big Data Virtual Presentation. "Adaptive Analytics Via Network Science," Big Ideas Virtual Week, Virtual. Status: Completed. (October 1, 2020). Computer Science, Texas State University.
Student(s): Maria Tomasso, Graduate, M.Sc.
Benjamin Bond, Undergraduate.
Eric Hull, Undergraduate.

Mentor, Invited Talk. "Detecting Diagnostics Bias via Social Network Analysis," Statistics Seminar, Derrick Hall 122. Status: Completed. (March 6, 2020). Mathematics, Computer Science.
Student(s): Maria Tomasso, Graduate, M.Sc.

Mentor, Presentation and Graduate Travel Support. "Spread of English Neologisms through Brazilian Portuguese Online Chatter, A Data Science Perspective," Hispanic & Luso-Brazilian Linguistics Conference, Arizona State University. Status: Completed. (March 29, 2019). Computer Science, Texas State University.
Student(s): Lia Nogueira de Moura, Graduate, Master.

Published Work:

Mentor, Paper in the Workshop Proceedings. "Enriching Content Analysis of Tweets using Community Discovery Graph Analysis," MediaEval 2020, Virtual. Status: Completed. (December 15, 2020). Computer Science, Texas State University.
Student(s): Andrew Magill, Graduate, Ph.D.
Lia Nogueira De Moura, Graduate, M.Sc.
Maria Tomasso, Graduate, Ph.D.
Mirna Elizondo, Undergraduate, B.Sc.

Mentor. "Identifying maritime vessels at multiple levels of descriptions using deep features," SPIE, Baltimore, MD. Status: Completed. (May 10, 2019). Computer Science, Texas State University.
Student(s): David Bo Heyse, Undergraduate.
Nicholas Warren, Undergraduate.

Software Package:

Mentor, github repository. "Graph Balancing in Python," n/a, https://github.com/DataLab12/graphB. Status: Completed. (December 14, 2020). Computer Science, Texas State University.
Student(s): Eric Hull, Undergraduate, B.Sc.

Mentor, Python Package. "pytwanalysis," n/a, virtual. Status: Completed. (September 22, 2020). Computer Science, Texas State University.
Student(s): Lia Nogueira De Moura, Graduate, M.Sc.

Software package:

Mentor, gitHub release. "From Multi-camera Overhead Object Tracking to Activity Recognition," gitHub, https://github.com/DataLab12/trackActivity. Status: Completed. (December 20, 2020). Computer Science, Texas State University. Student(s): Diego Sebastian Pelayo-Santana, Undergraduate, B.Sc.

G. Teaching Professional Development Activities Attended

Workshop, "New Computer Science Faculty Teaching Workshop," NSF, San Diego, CA, United States. (July 28, 2019 - July 30, 2019).

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

2. Articles:

a. Refereed Journal Articles:

Ngu, A., Mauldin, T., Metsis, V., Canby, M., & Tesic, J. (2019). Experimentation and Analysis of Ensemble Deep Learning in IoT Applications. *Open Journal of Internet Of Things (OJIOT)*, *5*(1), 133–149. Retrieved from http://nbn-resolving.de/urn:nbn:de:101:1-201808051930495128214 8

Naphade, M., Smith, J. R., Tesic, J., Chang, S. F., Hsu, W., Kennedy, L., … Curtis, J. (2006). Large-Scale Concept Ontology for Multimedia. *IEEE Multimedia Magazine*, *13*. Published.

Tesic, J. (2005). Metadata Practices for Consumer Photos. *IEEE Multimedia Magazine*, *12*. Published.

Orton, G. S., Fisher, B. M., Baines, K. H., Stewart, S. ., Friedson, A. ., Ortiz, J. ., … Parija, K. C. (1998). Characteristics of the Galileo probe entry site from Earth-based remote sensing observations. *Journal of Geophysical Research*. Published.

b. Non-refereed Articles:

Tesic, J., Sullivan, K., Manjunath, B. S., & Chandrasekaran, S. (2015). Scalable Video Indexing, Search, and Retrieval. *NAVAIR Journal*. Published.

3. Conference Proceedings:

a. Refereed Conference Proceedings:

Tesic, J., Magill, A., Nogueira de Moura, L., & Tomasso, M. E. (2020). Enriching Content Analysis of Tweets using Community Discovery Graph Analysis. Retrieved from https://www.eigen.no/

Tesic, J., & Tamir, D. (2020). Computing with Words in Maritime Piracy and Attack Detection Systems. In *Lecture Notes in Computer Science* (Vol. 12197). Cham, U.S.: Springer International Publishing. https://doi.org/https://doi.org/10.1007/978-3-030-50439-7_30

Samimi, H., Tesic, J., & Ngu, H. H. (2019). Patient Centric Data Integration for Improved Diagnosis and Risk Prediction. In *Heterogeneous Data Management, Polystores, and Analytics for Healthcare* (pp. 185–195). Springer, Cham: Springer International Publishing. https://doi.org/https://link.springer.com/chapter/10.1007/978-3-030-33752-0_13

Dunstatter, N., Tahsini, A., Guirguis, M. S., & Tešić, J. (2019). Solving Cyber Alert Allocation Markov Games With Deep Reinforcement Learning. In *10th Conference on Decision and Game Theory for Security (GameSec)*.

Tesic, J., Warren, N., & Heyse, D. B. (2019). Identifying maritime vessels at multiple levels of descriptions using deep features. In *Artificial Intelligence and Machine Learning for Multi-Domain Operations* (Vol. 11006). United States. https://doi.org/https://doi.org/10.1117/12.2519248

Tesic, J., Warren, N., Garrard, B., & Staudt, E. (2018). Transfer Learning of Deep Neural Networks for Visual Collaborative Maritime Asset Identification. Retrieved from http://www.sis.pitt.edu/lersais/cic/2018/index.html

Tesic, J. (2015). An end-to-end system for content-based video retrieval using behavior, actions, and appearance with interactive query refinement.

Dantone, M., Sullivan, K., & Tesic, J. (2010). Multimedia Event Detection (MED) Evaluation Task.

Xie, L., Yan, R., Tesic, J., Natsev, A., & Smith, J. R. (2010). Probabilistic visual concept trees.

Natsev, A., Smith, J. R., Tesic, J., Xie, L., & Yan, R. (2008). IBM Multimedia Analysis and Retrieval System - Video Olympics People's choice award.

Natsev, A., Haubold, A., Tesic, J., Xie, L., & Yan, R. (2007). Semantic concept-based query expansion and re-ranking for multimedia retrieval.

Yan, R., Tesic, J., & Smith, J. R. (2007). Model-shared subspace boosting for multi-label classification.

Tesic, J., Natsev, A., & Smith, J. R. (2007). Cluster-based Data Modeling for Semantic Video Search.

Tesic, J., Natsev, A., Xie, L., & Smith, J. R. (2007). Data modeling strategies for imbalanced learning in visual search.

Xie, L., Tesic, J., & Natsev, A. (2007). Dynamic multimodal fusion in video search.

Tesic, J., Natsev, A., Seidl, J., & Smith, J. R. (2007). IBM marvel interactive video threading.

Natsev, A., Smith, J. R., Tesic, J., Xie, L., & Yan, R. (2007). IBM Multimedia Search and Retrieval System.

Tesic, J., & Smith, J. R. (2006). Efficient summarizing of multimedia archives using cluster labeling.

Tesic, J., & Smith, J. R. (2006). Semantic labeling of multimedia content clusters.

Christel, M., Naphade, M., Natsev, A., & Tesic, J. (2006). Assessing the filtering and browsing utility of automatic semantic concepts for multimedia retrieval.

Natsev, A., Naphade, M. R., & Tesic, J. (2005). Learning the Semantics of Multimedia Queries and Concepts from a Small Number of Examples.

Smith, J. R., Naphade, M. R., Natsev, A., & Tesic, J. (2005). Multimedia research challenges for industry.

Smith, J. R., Campbell, M. S., Naphade, M. R., Natsev, A., & Tesic, J. (2005). Learning of semantic concepts in broadcast video.

Newsam, S., Tesic, J., Wang, L., & Manjunath, B. S. (2004). Issues in Managing Video Datasets.

Tesic, J., Bhagavathy, S., & Manjunath, B. S. (2003). Issues Concerning Dimensionality and Similarity Search.

Bhagavathy, S., Tesic, J., & Manjunath, B. S. (2003). On the Rayleigh nature of Gabor filter outputs.

Tesic, J., & Manjunath, B. S. (2003). Issues concerning multimedia mining, methods for mining video data.

Tesic, J., & Manjunath, B. S. (2003). Nearest Neighbor Search for Relevance Feedback.

Tesic, J., Newsam, S., & Manjunath, B. S. (2003). Mining Image Datasets using Perceptual Association Rules.

Tesic, J., Newsam, S., & Manjunath, B. S. (2002). Scalable Spatial Event Representation.

Dujković, D., Tesic, J., Mashanovich, M., Rakoćevic, I., Milosavljevi´c, I., Reljin, B., & Kostić, P. (1998). Automated segmentation and pathogen cell detection in tissues (in Serbian).

b. Non-refereed:

Natsev, A., Jiang, W., Merler, M., Smith, J. R., Tesic, J., Xie, L., & Yan, R. (2008). IBM Research trecvid-2008 video retrieval system.

Campbell, M., Haubold, A., Natsev, A., Smith, J. R., Tesic, J., Xie, L., … Yang, J. (2007). IBM research trecvid-2007 video retrieval system.

Campbell, M., Haubold, A., Ebadollahi, S., Naphade, M. R., Natsev, A., Seidl, J., … Xie, L. (2006). IBM Research trecvid-2006 video retrieval system.

Amir, A., Argillander, J., Campbell, M., Haubold, A., Ebadollahi, S., Kang, F., … Volkmer, T. (2005). IBM Research trecvid-2005 video retrieval system.

Amir, A., Chang, S. F., Franz, M., Iyengar, G., Kender, J., Lin, C. Y., … Tesic, J. (2004). IBM research TRECVID-2004 video retrieval system.

4. Abstracts:

Nogueira De Moura, L., & Tesic, J. (Accepted / In Press). Spread of English Neologisms through Brazilian Portuguese Online Chatter, A Data Science Perspective. Retrieved from https://www.journals.elsevier.com/lingua

Tesic, J., Newsam, S., & Manjunath, B. S. (2002). Challenges in Mining Large Image Datasets. *IPAM Short Program on Mathematical Challenges in Scientific Data Mining. Los Angeles, CA*. Published.

Tesic, J., & Manjunath, B. S. (2000). Mining image datasets. *Workshop on Mining Scientific Datasets, Minneapolis, MN*. Published.

5. Reports:

Tesic, J. (2004). *Managing Large-scale Multimedia Repositories*. *Ph.D. thesis, UC Santa Barbara*.

Tesic, J., & Arantes, D. (1998). *Imaging of electrocardiogram (ECG) signals*. *Computer Science Dept, University of Campinas, Brazil*.

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

Wang, J. Z., Boujemaa, N., Del Bimbo, A., Geman, D., Hauptmann, A., Tesic, J., MIR workshop, "Diversity in multimedia retrieval research panel," ACM Multimedia, Santa Barbara, CA. (October 2006).

2. Invited Talks, Lectures, and Presentations:

Rusnak, L. J., Tesic, J., 2021 Virtual Health Scholar Showcase, "A Characterization of Diagnostic Efficacy via Structural Balance," Translational Health Center, Texas State University, San Marcos, TX, United States. (April 14, 2021).

Tesic, J., Baumgartner, L. M., Johnson, M. W., Vanegas, S. B., Texas State Universtiy Scholarship and Teaching Excellence Program, Texas State University, San Marcos, TX. (February 2020).

Tesic, J., ONR Science of Autonomy, "Object Cueing Using Biomimetic Approaches to Visual Information Processing," ONR, Doubletree Crystal City, Crystal City, United States. (August 9, 2019).

Tesic, J., AMD, "Machine Learning and Computer Vision at Scale," AMD, AMD, Austin, TX, United States. (December 17, 2018).

Tesic, J., ATXGIS Day, "Maritime Asset Identification and Threat Recognition," City of Austin, Austin Public Library, Austin, TX, United States. (November 13, 2018).

Tesic, J., IBM Austin, "Maritime Asset Identification and Threat Recognition," IBM, IBM Austin, Austin. (November 8, 2018).

Tesic, J., Women in Data Science, "Data Science in Machine Vision Research," Texas State, San Marcos, United States. (March 23, 2018).

Tesic, J., UCSB class presentation, "IARPA FINDER geolocation project." (2014).

Tesic, J., NSF IGERT Seminar series, "Data Modeling Strategies for Imbalanced Learning." (February 2007).

Tesic, J., ECE/CS Department Seminar, "Learning the Semantics of Multimedia Queries from a Small Number of Examples," UC Santa Barbara. (November 2005).

Tesic, J., Methods for Mining Video Data, Invited Session, "Issues Concerning Multimedia Mining," American Statistical Association Joint Statistical Meetings (JSM), San Francisco, CA. (August 2003).

Tesic, J., ADVENT Seminar Series, "Efficient Query Processing in Relevance Feedback," Columbia University, NY City, Mitsubishi Electric Research Laboratories, Murray Hill, NJ, and IBM Research, Hawthorne, NY. (March 2003).

Tesic, J., Institute for Scientific Computing Research Seminar, "Mining Large Image Datasets," Center for Applied Scientific Computing, Lawrence Livermore National Laboratory, CA. (October 2001).

3. Consultancies:

Government, City of Austin, Austin. (November 13, 2018 - August 31, 2019).

For Profit Organization, IBM, Austin, TX. (October 8, 2018 - December 21, 2018).

Government, Mayachitra, Inc., Santa Barbara, CA. (September 1, 2017 - January 26, 2018).

5. Other Works not in Print:

a. Works "submitted" or "under review":

Conference Proceedings:

Gong, H., Tesic, J., Tao, J., Luo, X., & Wang, F. (Submitted / Under Review). Automated Pavement Crack Detection with Deep Learning Methods: What Are Main Factors and How to Improve the Performance? (August 1, 2021)

Journal Articles:

Tesic, J., Rusnak, L. J., & Tomasso, M. E. (Submitted / Under Review). Characterizing Attitudinal Network Graphs through Frustration Cloud. *Data Mining and Knowledge Discovery*. Retrieved from https://www.springer.com/journal/10618 (July 27, 2020)

b. Works "in progress":

Conference Proceedings:

Tesic, J., & Tamir, D. (In Preparation; Not Yet Submitted). Robust Multi-camera Vehicle Activity Detection and Identification. Retrieved from https://2021.acmmm.org/

Journal Articles:

Tesic, J. (In Preparation; Not Yet Submitted). Community Discovery Enhancement of Tweet Classification: Fake News Perspective. *Journal of Complex Network*.

Tesic, J., Rusnak, L. J., & Tomasso, M. E. (In Preparation; Not Yet Submitted). Surveys as Attitudinal Network Graphs: Frustration Cloud Approach for Fair Assessment. *Network Science*. Retrieved from https://www.cambridge.org/core/journals/network-science/information

c. Other Works Not in Print:

Creative Works Cited in Conference Papers / Presentations:

Tesic, J., "Identifying Maritime Vessels at Multiple Levels of Descriptions David Bo," SPIE, Baltimore, MD, United States. (April 17, 2019).

Demonstrations:

Tesic, J., NAVAIR AI Center Of Excellence Workshop, "Object Cueing Using Biomimetic Approaches to Visual Information Processing," NAVAIR, Naval Air Station Patuxent River, Lexington, United States. (January 30, 2020).

Tesic, J., Navy Forum for SBIR/STTR Transition, "Object Cueing Using Biomimetic Approaches to Visual Information Processing," NAVAIR, Gaylord Convention Center, National Harbor, MD, United States. (April 2, 2017).

Posters:

Fulton, L. V., McLeod, A. J., Hewitt, B. A., Ramamonjiarivelo, Z. H., Dolezel, D. M., Ekin, T., Gibbs, D. L., Tesic, J., 5th Annual Texas State University Health Scholar Showcase, "Deep Vision for Breast Cancer Classification," Texas State, Virtual, San Marcos, TX. (April 2021).

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Tesic, Jelena. Object Cueing Using Biomimetic Approaches to Visual Information Processing, NAVAIR, Federal, $199,708.00. (Submitted: September 18, 2020, Funded: January 11, 2021 - December 17, 2022). Grant.

Tesic, Jelena. NAVAIR SBIR N14A-T008, Navy, Federal, $307,005.00. (Funded: March 19, 2018 - August 31, 2020). Grant.

Tesic, Jelena (Principal). NVIDIA GPU Grant, NVIDIA Corporation, Private / Foundation / Corporate, $1,200.00. (Funded: November 1, 2018 - October 31, 2019). Gift.

Metsis, Vangelis, Tesic, Jelena, Tamir, Dan. Research and Development of Image and Text Analysis Tools for Automatic Social Media Content Classification, http://socialmeteranalysis.it/, Private / Foundation / Corporate, $12,000.00. (Submitted: January 10, 2018, Funded: September 2018 - May 31, 2019). Grant.

Tesic, Jelena. Object Cueing UsingBiomimetic Approaches to Visual Information Processing, Navy, Federal, $998,770.00. (Funded: November 10, 2015 - January 26, 2018). Sponsored Research.

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

Fulton, Lawrence V (Principal), Tesic, Jelena (Co-Principal), Hewitt, Barbara A (Co-Principal), Dolezel, Diane M (Co-Principal), Gibbs, David L (Co-Principal), Ekin, Tahir (Co-Principal), Ramamonjiarivelo, Zo H (Co-Principal), McLeod, Alexander John (Co-Principal). Deep Learning for Male and Female Breast Cancer, Department of Defense, Federal, $1,000,000.00. (Submitted: March 2021, Funded: September 2021 - 2023). Grant.

Tesic, Jelena, Rusnak, Lucas J, Burtscher, Martin, Vaughan, Adam David, Villagran, Melinda Morris. III: Medium: Bias-free Analysis and Prediction of Decisions and Opinions, NSF, Federal, $1,199,938.00. (Submitted: November 13, 2020). Grant.

Tesic, Jelena. America Influences Mapping Autonomous Potential in Serbia (AI-MAPS) AI driven mapping, Federal, $29,586.00. (Submitted: July 19, 2020). Sponsored Research.

Tesic, Jelena, Rusnak, Lucas J, Villagran, Melinda Morris, Burtscher, Martin, Vaughan, Adam David. Deeds Speak Louder Than Words Policy Guidance Tool, Private / Foundation / Corporate, $981,257.00. (Submitted: July 1, 2020). Sponsored Research.

Tesic, Jelena. Automated Imagery Annotation and Segmentation for Military Tactical Objects, US Army Missle Defense Command, Federal, $53,998.00. (Submitted: June 26, 2020). Sponsored Research.

Tamir, Dan (Principal), Percent Contribution: 50%, Tesic, Jelena (Co-Principal), Percent Contribution: 50%. RAPID: Fuzzy Logic Decision Support for COVID-19, NSF, Federal, $66,482.00. (Submitted: April 2020). Grant.

Tesic, Jelena. N20A-T007-0220 Cross Platform Reinforcement and Transfer Learning for Periscope Imagery, NAVAIR, Federal, $119,998.00. (Submitted: February 26, 2020). Grant.

Rusnak, Lucas J (Co-Principal), Percent Contribution: 50%, Tesic, Jelena (Principal), Percent Contribution: 50%, Villagran, Melinda Morris (Supporting), Burtscher, Martin (Supporting). SCH: INT: Improving Diagnostic Efficacy and Patient Care, NSF, Federal, $1,196,052.00. (Submitted: 2019). Grant.

Ekin, Tahir, Percent Contribution: 20%, Tesic, Jelena, Percent Contribution: 20%, Lakomski, Gregory Randell, Percent Contribution: 20%. Bayesian Clustering Supported Interpretable Deep Neural Network Modeling

Framework of Electronic Health Record Databases, Centers for Medicare and Medicaid Services, Federal, $60,000.00. (Submitted: June 19, 2019). Grant.

Rusnak, Lucas J, De Nadai, Alessandro Stevens, Tesic, Jelena. HDR TRIPODS: Texas State University, NSF, Federal, $1,489,832.00. (Submitted: May 8, 2019). Grant.

Tesic, Jelena, De Nadai, Alessandro Stevens, Rusnak, Lucas J. Distributed Machine Learning of Computer Network Defense Data, JFHQ-DoDIN, Federal, $1,374,987.00. (Submitted: March 8, 2019). Sponsored Research.

3. Funded Internal Grants and Contracts:

Tesic, Jelena, Qasem, Apan Muhammad. IBM, $20,000.00. (Funded: December 10, 2018 - Present). Gift.

D. Scholarly / Creative Fellowships, Awards, Honors:

Award / Honor Recipient: IBM First Plateau Invention Achievement Award in appreciation and recognition of creative contributions to IBM progress.
July 2007

Award / Honor Recipient: IBM Research Division Technical Group Award has been presented for Image Filtering Benchmark Team Award.
February 2007

Award / Honor Recipient: IBM Research Division Award for Multimedia Analysis and Retrieval System.
2006

Award / Honor Recipient: IBM Research Division Award for Semantic Content-based Multimedia Analysis and Retrieval.
December 2005

Award / Honor Recipient: Best paper content track, ACM Multimedia.
2005

Award / Honor Recipient: IEEE CVPR student travel grant award, IEEE Computer Society.
2003

Award / Honor Recipient: Presidential Work and Study Award from University of California at Santa Barbara.
July 2001

Award / Honor Recipient: Outstanding Teaching Assistant for Department of Electrical and Computer Engineering, University of California Santa Barbara.
June 1999

Award / Honor Recipient: Summer Undergraduate Research Fellowship Award from Caltech/JPL, Pasadena, CA.
1997

E. Scholarly / Creative Professional Development Activities Attended:

Workshop, "NSF CISE CAREER Workshop 2020," NSF, Chapel Hill, NC, United States. (March 8, 2020 - March 10, 2020).

Conference Attendance, "Data Science Workshop," IEEE, Lausanne, Switzerland. (June 6, 2018 - June 9, 2018).

F. Media Recognition:

Internet, Faculty Development Twitter Account. (February 21, 2020).

Internet, University Advancement Twitter Account. (February 18, 2020).

Internet, Texas State Announcement. (November 11, 2019).

Internet, Texas State Big Idea Selection. (April 10, 2019).

IV. SERVICE

A. Institutional

1. University:

Undergraduate Advisor, STEM Undergraduate Research Experience (SURE). (September 19, 2019 - September 19, 2021).

Undergraduate Advisor, NSF Research Experiences for Undergraduates (REU) Site. (June 7, 2019 - August 9, 2021).

Undergraduate Advisor, SxSW Innovation Lab. (November 2019 - November 2020).

Undergraduate Advisor, HSMC MathWorks Camp. (June 1, 2019 - July 15, 2020).

Invited Speaker, STEP program. (February 22, 2020).

Undergraduate Advisor, WiSE Conference. (March 8, 2019).

2. College:

Reviewer. (January 1, 2019 - December 31, 2019).

3. Department/School:

Participant, CS73100 doctoral research. (September 20, 2019 - September 20, 2020).

Organizer, Seminar. (November 10, 2017).

B. Professional:

Area Chair, ICIP 2020, Abu Dhabi, United Arab Emirates. (October 25, 2020 - October 28, 2020).

Area Chair, ACM Multimedia, Seattle, WA, United States. (July 16, 2020 - July 17, 2020).

Area Chair, ACM Multimedia, Seattle, WA, United States. (March 1, 2020 - June 15, 2020).

Reviewer / Referee, NSF Panel, Alexandria, DC, United States. (March 26, 2020 - March 27, 2020).

Reviewer / Referee, NSF Panel, Alexandria, United States. (November 25, 2019 - November 26, 2019).

Area Chair, IEEE ICIP 2019, Taipei, Taiwan. (December 28, 2018 - September 25, 2019).

Area Chair, IEEE ICME 2019, Shangai, China. (January 1, 2019 - July 25, 2019).

Area Chair, ACM Multimedia, Amherst, MA, United States. (June 16, 2019 - June 17, 2019).

Area Chair, IEEE ICME 2018, San Diego, CA, United States. (November 21, 2017 - July 27, 2018).

Guest Editor Special Issue on Collaborative Tagging of Multimedia, IEEE Multimedia Magazine. (July 2008 - September 2008).

Reviewer / Referee, Reviewer for the IEEE Transactions Pattern Analysis and Machine Intelligence, IEEE Transactions on Neural Networks, IEEE Transactions on Knowledge and Data Engineering, IEEE Multimedia Transactions, IEEE Multimedia Magazine, Journal of Visual Communication and Image Representation, IEEE Signal Processing Magazines, , IEEE Transactions on Multimedia Computing, Communications, and Applications, ACM Multimedia Systems Journal, and EURASIP Journal on image and Video Processing. (1925).

Technical program committee ACM Multimedia, IEEE International Conference on Multimedia and Expo (ICME), IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), ACM International Conference on Image and Video

Retrieval (CIVR), IEEE International Conference on Image Processing (ICIP), and SIAM SDM Workshop on Mining Scientific and Engineering, , IEEE ICIP IBM Student Paper award. (1925).

C. Community:

Officer, Westlake and Eanes Science and Technology Association (WESTA), Westlake, TX. (September 1, 2018 - August 30, 2021).

Organizer, First Lego League Team Coach, Austin. (August 22, 2018 - January 18, 2020).

STEAM Day Lead, Cedar Creek Elementary, Austin, TX. (February 3, 2017 - January 31, 2019).

Co-leader of LEGO Robotics workshop in EXITE and Girls TechKnow camps (with Jim Wynne), 2006-2008, and volunteer 2004-2006, IBM T.J. Watson Research Center, NY. (2004 - 2008).

Mentor to 8th grade Bronx students, First Lego League NYC competition 2005-2006 (the team placed in top 10% in the New York City). (2005 - 2006).

D. Organization Memberships:

ACM. (January 2006 - Present).

IEEE. (January 2004 - Present).

E. Service Honors and Awards:

Award / Honor Recipient: IBM Award of Distinction for voluntarism.
March 2006