TEXAS STATE VITA

I. Academic/Professional Background

A. 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*	*Comments*	*Dates*
Guest lecturer	University of California Santa Barbara	Spring Q	2014
Graduate Teaching Assistant	University of California Santa Barbara		September 1998 - June 2001

D. Relevant Professional Experience

Position	*Entity*	*Comments*	*Dates*
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 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, Independent Study, "Data Integration for Hematologic Malignancy Cancer Analysis", Status: In Progress. (January 22, 2019 - Present). Computer Science, Texas State.
Student(s): Hanie Samimi, Doctoral, Ph.D.

Supervisor / Chair, Project, "Small Sample Learning in Adversarial Settings", Status: In Progress. (January 1, 2019 - Present). Computer Science, Texas State.
Student(s): David Heyse, Undergraduate.

Supervisor / Chair, Project, "Research and Development of Image and Text Analysis Tools for Automatic Social Media Content Classification", Status: In Progress. (January 1, 2019 - Present). Computer Science, Texas State University.
Student(s): Joshua Lambert, Graduate.
Julian Jones, Undergraduate.

Supervisor / Chair, Project, "Change detection using Machine Learning in Georeferenced Imagery", Status: In Progress. (December 10, 2018 - Present). Computer Science, Texas State University.
Student(s): Brent Redmon, Undergraduate.
Daniel Lee, Undergraduate.

Supervisor / Chair, Project, "Structural Graph Theory for Social and Health Network Analysis", Status: In Progress. (December 10, 2018 - Present). Computer Science, Texas State University.
Student(s): Constance Angeley, Undergraduate.
Rachel Kelmenson.

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

Supervisor / Chair, Master's Thesis, "How Bias are we about Bias in Social Networks?", Status: In Progress. (March 17, 2018 - Present). Computer Science, Texas State University.
Student(s): Joshua Mitchell, Graduate, Master.

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

Supervisor / Chair, Project, "Deep Learning for Multiple Levels of Description", Status: In Progress. (August 22, 2018 - May 31, 2019). Computer Science, Texas State.
Student(s): Nicholas Warren.

Member, Master's Thesis, "A Markov Game Model for Securing CPS using Reinforcement Learning", Status: In Progress. (November 6, 2017 - May 31, 2019). Computer Science, Texas State University.
Student(s): Alireza Tahsini, Graduate, Master.

Supervisor / Chair, Applied Research Project, "Vector Quantization for Indexing Billions of Deep Features", Status: In Progress. (September 1, 2018 - December 14, 2018). Computer Science, Texas State University.
Student(s): Gentry Atkinson, Doctoral, Ph.D.

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:

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

CS 7313 – Advanced Machine Learning and Pattern Recognition, Curriculum Update – CS faculty Team effort, Texas State University. Proposed: Sep 2018, in effect Fall 2019.

CS 7323 – Advanced Topics in Computer Vision, Curriculum Update – CS faculty Team effort, Texas State University. Proposed: Sep 2018, in effect Fall 2019.

CS 43**/53** – Introduction Computer Vision, New Course proposal– CS faculty Team effort, Texas State University. Proposed: Sep 2018, in effect Spring 2019.

Advanced Topics in Computer Vision, Curriculum Development, Graduate Class Project: 2014, University of California Santa Barbara.

F. Other:

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

III. SCHOLARLY/CREATIVE

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

2. Articles:

a. Refereed Journal Articles:

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. (Accepted / In Press). Identifying Maritime Vessels at Multiple Levels of Descriptions using Deep Features. SPIE 2019 conference on "Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications", 14 - 18 April 2019, Baltimore, Maryland, United States (oral presentation)

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

A. Hoogs et all (2015). An end-to-end system for content-based video retrieval using behavior, actions, and appearance with interactive query refinement, 12th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), https://ieeexplore.ieee.org/abstract/document/7301807.

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

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

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.

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

B. Works Not in Print:

2. Invited Talks, Lectures, and Presentations:

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).

3. Consultancies:

For Profit Organization, Spark Cognition, Austin, TX. (July 8, 2018 - Present).

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:

Tesic, J., Rusnak, L. J., & Mitchell, J. (Submitted / Under Review). Characterizing Bias and Detecting Inequity in Social Networks via Agreeable Cuts. In *ACM KDD*. New York, NY, USA.

Tesic, J., Rusnak, L. J., & Mitchell, J. (Submitted / Under Review). Bias Trends in Social Network Analysis. In *IEEE DSW*. New York, NY, USA.

b. Works "in progress":

Conference Proceedings:

Tesic, J., & Warren, N. (In Preparation; Not Yet Submitted). Learning object attributes at multiple level of description: a small sample case. In *ACM Multimedia*. New York, NY, USA: ACM.

c. Other Works Not in Print:

Demonstrations:

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).

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Tesic, Jelena. NAVAIR SBIR N14A-T008, Navy, Federal, $307,005.00. (Funded: March 2018 - March 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.

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

E. Scholarly / Creative Professional Development Activities Attended:

Workshop, "The Art of Successful Grantsmanship: What You Need to Know Before You Write," Texas State University, San Marcos, TX. (November 2, 2018 - Present).

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

IV. SERVICE

A. Institutional

3. Department/School:

Organizer, Seminar. (November 10, 2017).

B. Professional:

Area Chair, ACM Multimedia 2019, Nice France (October 2019).

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

Area Chair, IEEE ICME 2019, Shangai, China. (October 1, 2018 - July 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).

C. Community:

Organizer, Cedar Creek Elementary Lego League Teams, Austin. (August 22, 2018 - May 31, 2019).

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

D. Organization Memberships:

ACM. (January 2006 - Present).

IEEE. (January 2004 - Present).

E. Service Honors and Awards: