Curriculum Vitae
ATHANASIOS TSALATSANIS, Ph.D.
Associate Professor
Feb 1, 2017

Mailing Address: USF Health Program for Comparative Effectiveness Research
Department of Internal Medicine
Morsani College of Medicine
University of South Florida
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Academic Degrees

1996-2001 Bachelor of Science, Production Engineering and Management, Technical University of Crete, Greece
Thesis topic: "The vision system of the ATRV-Mini mobile robot: Applications and functionality"

2001-2003 Masters of Science, Production Engineering, Technical University of Crete, Greece
Thesis topic: "Vision-based mobile robot navigation"

2004-2008 Doctor of Philosophy, Industrial and Management Systems Engineering, University of South Florida, Tampa, Florida
Dissertation topic: "Control of autonomous robot teams in industrial applications"

Post-Graduate Training

2008-2009 Postdoctoral fellowship, Industrial and Management Systems Engineering, University of South Florida, Tampa, Florida
Concentration: "Healthcare engineering"

Employment

2004-2005 Research Assistant, Center for Robot Assisted Search and Rescue, Department of Computer Science and Engineering, College of Engineering, University of South Florida, Tampa, Florida

2005-2008 Research Assistant, Unmanned Systems Laboratory, Department of Computer Science and Engineering, College of Engineering, University of South Florida, Tampa, Florida

2006-2007 Graduate Assistant, Department of Industrial and Management Systems Engineering, College of Engineering, University of South Florida, Tampa, Florida

2009-2010 Research Associate, Center for Evidence-based Medicine and Health Outcomes Research, Morsani College of Medicine, University of South Florida, Tampa, Florida

Academic Appointments

2010-2013 Assistant Professor, Center for Evidence-based Medicine and Health Outcomes Research, Clinical and Translational Science Institute, Morsani College of Medicine, University of South Florida

2010-2013 Courtesy Faculty, Department of Internal Medicine, Morsani College of Medicine, University of South Florida, Tampa, Florida

2013-2015 Assistant Professor, Division of Evidence-based Medicine, Department of Internal Medicine, Morsani College of Medicine, University of South Florida, Tampa, Florida

2015-Present Associate Professor, USF Health Program for Comparative Effectiveness Research & Department of Internal Medicine, Division of Evidence-based Medicine, Morsani College of Medicine, University of South Florida, Tampa, Florida

Directorates

2012-2013 Director, Division of Health Informatics and Decision Making, Clinical and Translational Science Institute, Morsani College of Medicine, University of South Florida, Tampa, Florida

2013-Present Assistant Director, Health Informatics Masters Program, Graduate and Postdoctoral Affairs, Morsani College of Medicine, University of South Florida, Tampa, Florida

Peer Reviewed Journal Publications (manuscripts)

1. A. Tsalatsanis, K. Valavanis, A. Yalcin, "Vision Based Target Tracking and Collision Avoidance for Mobile Robots". Journal of Intelligent and Robotic Systems, Vol. 48, No. 2, pp. 285-304, 2007

2. A. Tsalatsanis, K. Valavanis, N. Tsourveloudis, "Mobile robot navigation using sonar and range measurements from uncalibrated cameras". Journal of Intelligent and Robotic Systems, Vol. 48, No. 2, pp. 253-284, 2007.

3. A. Tsalatsanis, I. Hozo, A. Vickers, B. Djulbegovic, "A regret theory approach to decision curve analysis: A novel method for eliciting decision makers' preferences and decision-making". BMC Medical Informatics and Decision making, Vol. 10:51, 2010. PMID: 20846413, PMCID:PMC2954854.

4. A. Tsalatsanis, A. Yalcin, K.P. Valavanis, "Dynamic task allocation in cooperative robot teams". Robotica, 2011, doi: 10.1017/S0263574711000920.

5. E. Gil-Herrera, A. Tsalatsanis, A. Yalcin, A. Kaw, "Predicting academic performance using Rough Set theory based knowledge discovery methodology". International Journal of Engineering Education, vol. 27, No. 5, pp. 992-1002. 2011.

6. A. Tsalatsanis, L. Barnes, I. Hozo, B. Djulbegovic, "Extensions to Regret-based Decision Curve Analysis: An Application to hospice referral for terminal patients". BMC Medical Informatics and Decision Making, Vol. 11:77, 2011. PMID: 22196308, PMCID:PMC3305393.

7. A. Tsalatsanis, L. Barnes, I. Hozo, John Skvoretz, B. Djulbegovic, "A social network analysis of treatment discoveries in cancer". PlosOne, vol. 6(3), e18060, 2012. PMID: 21464896, PMCID:PMC3065482.

8. B. Djulbegovic, I. Hozo, J. Beckstead, A. Tsalatsanis, S.G. Pauker, "Dual processing model of medical decision-making". BMC Medical Informatics and Decision Making, Vol. 12:94, 2012. PMID: 22943520, PMCID:PMC3471048.

9. JM Hernandez, A Tsalatsanis, LA Humphries, M Branko, B Djulbegovic, V Velanovic, "Defining optimum treatment of patients with pancreatic adenocarcinoma using regret-based decision curve analysis". Annals of Surgery, vol. 259(6), pp. 1208-14, 2013. PMID: 24169177.

10. B. Djulbegovic, J.W. Beckstead, S. Elqayam, T. Reljic, I. Hozo, A. Kumar, J.Cannon-Bowers, S. Taylor, A. Tsalatsanis, B. Turner, C. Paidas, "Evaluation of physicians' cognitive styles'. Medical Decision Making, vol. 34(5), pp. 627-637, 2014. PMID: 24722474.

11. B. Djulbegovic, S. Elqayam, T. Reljic, I. Hozo, B. Miladinovic, A. Tsalatsanis, A. Kumar, J. Beckstead, S. Taylor, J. Cannon-Bowers, "How do physicians decide to treat: an empirical evaluation of the threshold model". BMC Medical Informatics and Decision Making, vol. 14(1), pp.47, 2014. PMID: 24903517.

12. A. Cucchetti, B. Djulbegovic, A. Tsalatsanis, A. Vitale, I. Hozo, M. Cescon, F. Piscaglia, G. Ercolani, F. Tuci, U. Cilo, A. D. Pinna, "When to perform hepatic resection for intermediate stage hepatocellular carcinoma: a regret-based approach". Hepatology, 2014. doi: 10.1002/hep.27321. [Epub ahead of print] PMID: 25048515.

13. H. Mahony, A. Tsalatsanis, A. Kumar, B. Djulbegovic, "Evolution of treatment regimens in multiple myeloma: a social network analysis". PlosOne, 2014. DOI: 10.1371/journal.pone.0104555

14. Tsalatsanis, Athanasios, et al. "Dual Processing Model for Medical Decision-Making: An Extension to Diagnostic Testing." *PloS one* 10.8 (2015): e0134800.

15. Gil-Herrera, Eleazar, et al. "Rough set theory based prognostic classification models for hospice referral." *BMC medical informatics and decision making* 15.1 (2015): 98.

16. A. Tsalatsanis, I. Hozo, B. Djulbegovic, "Toward evidence-based diagnostic metrics: Meta-Analysis of mutual information as a preferred way to summarize diagnostic test information", Under review Medical Decision Making, 2015.

17. Djulbegovic, B., Tsalatsanis, A., & Hozo, I. (2015). Determining optimal threshold for statins prescribing: individualization of statins treatment for primary prevention of cardiovascular disease. *Journal of evaluation in clinical practice*.

18. D.A. Martizez, A. Tsalatsanis, A. Yalcin, J. Zayas-Castro, B. Djulbegovic, "Activating clinical trials: a process improvement approach". Trials 17.1, 2016.

19. Hozo, Iztok, et al. "Towards theory integration: Threshold model as a link between signal detection theory, fast-and-frugal trees and evidence accumulation theory." *Journal of evaluation in clinical practice* (2016).

20. Kharfan-Dabaja, M. A., R. Parody, J. Perkins, O. Lopez-Godino, L. Lopez-Corral, L. Vazquez, D. Caballero et al. "Tacrolimus plus sirolimus with or without ATG as GVHD prophylaxis in HLA-mismatched unrelated donor allogeneic stem cell transplantation." *Bone marrow transplantation* (2016).

21. Hozo, Iztok, Athanasios Tsalatsanis, and Benjamin Djulbegovic. "Monte Carlo Decision Curve Analysis Using Aggregate Data." *European Journal of Clinical Investigation* (2017).

22. Hozo, Iztok, Athanasios Tsalatsanis, and Benjamin Djulbegovic. "Expected utility versus expected regret theory versions of decision curve analysis do generate different results when treatment effects are taken into account." *Journal of Evaluation in Clinical Practice* (2016).

23. Djulbegovic, Benjamin, Athanasios Tsalatsanis, Rahul Mhaskar, Iztok Hozo, Branko Miladinovic, and Howard Tuch. "Eliciting regret improves decision making at the end of

life." *European Journal of Cancer* 68 (2016): 27-37.

24. Djulbegovic, Benjamin, Athanasios Tsalatsanis, Rahul Mhaskar, Iztok Hozo, Branko Miladinovic, and Howard Tuch. "Improving Hospice Referral: Application of Regret-Based Decision Modeling at End-of-Life Care." (2016): 535-535.

Peer Reviewed Conference Proceedings (Manuscripts)

25. A. Tsalatsanis, K. Valavanis, A. Yalcin, "Vision based target tracking and collision avoidance for mobile robots", in proceedings of International Conference on Artificial Intelligence, vol. 2, pp:652-658, Las Vegas, Nevada, 2006.

26. A. Tsalatsanis, A. Yalcin, K. P. Valavanis, "Automata-based supervisory controller for a mobile robot team", in proceedings of the Institute of Electrical and Electronic Engineers (IEEE) Latin American Robotics Symposium, pp:53-59, Santiago, Chile, 2006.

27. A. Tsalatsanis, K. Valavanis, N. Tsourveloudis, "Mobile robot navigation using sonar and range measurements from uncalibrated cameras", in proceedings of the IEEE Mediterranean Conference on Control and Automation, pp. 1-7, Ancona, Italy, 2006.

28. A. Tsalatsanis, K. P. Valavanis, A. Kandel, A. Yalcin, "Multiple sensor based UGV localization using fuzzy extended Kalman filtering", in proceedings of the IEEE Mediterranean Conference on Control and Automation, pp. 1-8, Athens, Greece, 2007.

29. A. Tsalatsanis, A. Yalcin, K.P. Valavanis, "Optimized task allocation in cooperative robot teams", in proceedings of the IEEE Mediterranean Conference on Control and Automation, pp. 270-275, Thessaloniki, Greece, 2009.

30. A. Tsalatsanis, A. Yalcin, A. Kaw, "Application of Emerging Knowledge Discovery Methods in Engineering Education", in proceedings of ASEE Annual Conference & Exposition, Austin, Texas, 2009.

31. E. Gil-Herrera, A. Yalcin, A. Tsalatsanis, L. Barnes, B. Djulbegovic, "Rough set theory based prognostication of life expectancy for terminally ill patients", in proceedings of the IEEE Annual International Conference of the Engineering in Medicine and Biology Society (EMBS), pp. 6438-41, Boston, Massachusetts, 2011. PMID: 22255812.

32. A. Tsalatsanis, E. Gil-Herrera, A. Yalcin, B. Djulbegovic, L. Barnes, "Designing patient-centric software applications for chronic disease management", in proceedings of the IEEE Annual International Conference of EMBS, pp. 3146-49, Boston, Massachusetts, 2011. PMID: 22255007.

33. E. Gil-Herrera, A. Yalcin, A. Tsalatsanis, L. Barnes, B. Djulbegovic, "Towards a classification model to identify hospice candidates in terminally ill patients", in proceedings

of the IEEE Annual International Conference of EMBS, pp. 1278-81, Chicago, Illinois, 2012. PMID: 23366132

34. E. Gil-Herrera, A. Tsalatsanis, A. Kumar, R. Mhaskar, A. Yalcin, B. Djulbegovic, "Identifying homogeneous subgroups for individual patient meta-analysis based on rough set theory", in proceedings of the IEEE Annual International Conference of EMBS, Chicago, Illinois, 2014. PMID: to appear

Abstracts/Posters

1. A. Tsalatsanis, A. Yalcin, K. Valavanis, "Mobile robot teams for patrolling and inspection" (poster). Institute of Industrial Engineers (IIE) Annual Conference, Orlando, Florida, May 20-24, 2006.

2. A. Tsalatsanis, A. Yalcin, K. Valavanis, "Hybrid control architecture for mobile robot teams", (poster). IIE Doctoral Colloquium, Nashville, Tennessee, May 19-23, 2007.

3. A. Tsalatsanis, I. Hozo, B. Djulbegovic, "Small world networks and treatment discovery process in cancer" (poster). ASCO Annual Meeting, Chicago, Illinois, June 4 -8, 2010. Abstract published in J Clin Oncol, vol. 28 (15), 6086, 2010.

4. I. Hozo, A. Tsalatsanis, A. Vickers, B. Djulbegovic, "A regret theory approach to decision curve analysis" (poster). Annual Meeting of Society for Medical Decision Making (SMDM), Toronto, Canada, Oct 18-21, 2010.

5. H. Georgiev, A. Tsalatsanis, A. Kumar, B. Djulbegovic, "Social network analysis of research programs in multiple myeloma" (poster). American Society of Hematology (ASH) Annual Meeting and Expo, San Diego, California, Dec 10-13, 2011. Abstract published in Blood, vol. 118 (21), 2011.

6. R. Mhaskar, B. Miladinovic, A. Tsalatsanis, A. Mbah, A. Kumar, K. Sehwan, R. Schonwetter, B. Djulbegovic, "External validation of prognostic models in terminally ill patients" (poster). ASH Annual Meeting and Expo, San Diego, California, Dec 10-13, 2011. Abstract published in Blood, vol. 118 (21), 2011.

7. J.M. Hernandez, A. Tsalatsanis, B. Djulbegovic, V. Velanovich, "Regret theory modeling in pancreatic adenocarcinoma" (poster). Annual Cancer Symposium of the Society of Surgical Oncology Orlando, Florida, Mar 21-24, 2012.

8. H. Mahony, A. Tsalatsanis, R. Mhaskar, A. Kumar, B. Djulbegovic, "Social network analysis of salvage therapies in multiple myeloma" (poster). ASH Annual Meeting and Expo, Atlanta, Georgia, Dec 8-11, 2012. Abstract published in Blood, vol. 120 (21), 2012.

9. J. Keshishian, A. Kumar, A. Tsalatsanis, M. Mafala, S. Vignesh, "Validation of a 5-point scoring system for prediction of malignancy in IPMN" (oral), Annual Scientific Meeting of

the American College of Gastroenterology, San Diego, California, Mar 8-9, 2013. Published in American Journal of Gastroenterology, 108, S63-S64, 2013.

10. B. Djulbegovic, J. Beckstead, A. Tsalatsanis, R. Mhaskar, A. Flynn, O. Fabelo, H. Tuch, A. Kumar, E. Pathak, I. Hozo, P. Jacobsen, "Anticipatory regret of commission but not omission leads to low post-decisional regret in terminally ill patients" (oral). Biennial European Meeting of SMDM Antwerp, Belgium, June 8-10, 2014.

11. A. Cucchetti, B. Djulbegovic, F. Piscaglia, A. Tsalatsanis, A. Vitale, I. Hozo, A. Pecorelli, M. Cescon, G. Ercolani, F. Tuci, U. Cillo, A.D. Pinna, "A regret-based approach to choose between trans-catheter arterial embolization and hepatic resection for intermediate hepatocellular carcinoma" (oral). Annual Meeting of the Italian Association for the Study of the Liver. Abstract published in Digestive and Liver Disease, vol. 46 (S1), 2014.

12. A. Tsalatsanis, I. Hozo, B.Djulbegovic, "Empirical evaluation of the acceptable regret model of medical decision making" (oral). Annual Meeting of Society for Medical Decision Making, Miami, Florida, Oct 18-22, 2014.

Book chapters

1. A. Tsalatsanis, K.P. Valavanis, A. Yalcin, UGV localization based on fuzzy logic and extended Kalman filtering. In Valavanis KP, ed. Applications of Intelligent Control to Engineering Systems. Springer, 2009.

Technical reports /Theses /Dissertations

1. A. Tsalatsanis, "The vision system of the ATRV-Mini mobile robot: Applications and functionality", (in Greek) Diploma Thesis, Technical University of Crete, Greece, 2001.

2. A. Tsalatsanis, "Vision-based mobile robot navigation", (in Greek) Masters of Science Thesis, Technical University of Crete, Greece, 2003.

3. N.O. Collier, S.C. Kranc, A. Tsalatsanis, A. Yalcin, "Efficacy of utility database management", Federal Highway Administration, Tallahassee, FL. Div., Florida State Dept. of Transportation, Tallahassee, 2007.

4. A. Tsalatsanis, "Control of autonomous robot teams in industrial applications", Ph.D. dissertation, University of South Florida, Tampa, Florida, 2008.

Invited talks

1. Regret theory approach to decision curve analysis, Center for EBM, CTSI, 2010.

2. Database design, workshop on Research Methods, CTSI College of Medicine, 2011.

3. Improving medical decision making by incorporating decision maker preferences. Dept. of Electrical and Computer Engineering, University of Denver, Colorado, 2011.

4. Principles of Comparative Effectiveness Research and Decision Making, Morsani College of Medicine, Tampa, FL, 2012.

5. Social network analysis in healthcare applications, Center for EBM, Clinical and Translational Science Institute (CTSI), 2012.

6. Empirical evaluation of the acceptable regret model, Division of Evidence Based Medicine (EBM), Morsani College of Medicine, 2014

7. Activating Clinical Trials: A process improvement approach, Division of EBM, Morsani College of Medicine, 2014.

8. Dual processing model for medical decision making, Division of EBM, Morsani College of Medicine, 2014

Teaching Experience

2007-2008	Teaching assistant, ENG 3615 Engineering Economics, College of Engineering, University of South Florida, Tampa, Florida Level: Undergraduate Audience: Engineering students Type of learning: Traditional
2007-2008	Instructor, ENG 4450 Introduction to Linear Systems, College of Engineering, University of South Florida, Tampa, Florida Level: Undergraduate Audience: Engineering students Type of learning: Traditional
2010	Lecturer, BMS 6835 Evidence-based Clinical Reasoning, Morsani College of Medicine, University of South Florida, Tampa, Florida Level: Graduate Audience: Medical students Type of learning: Traditional/online
2011-2013	Lecturer, BMS 6837 Evidence-based Clinical Reasoning II, Morsani College of Medicine, University of South Florida, Tampa, Florida Level: Graduate Audience: Medical students Type of learning: Traditional/online

2012-Present	Lecturer, BMS 6836 Evidence-based Clinical Reasoning I, Morsani College of Medicine, University of South Florida, Tampa, Florida Topics: Medical Decision Making Level: Graduate Audience: Medical students Type of learning: Traditional/online
2013-Present	Instructor, HIM 6667 Foundation in Management Information Systems, Morsani College of Medicine, University of South Florida, Tampa, Florida Level: Graduate Audience: General (Nurses, Physicians, Engineers, Administrators, etc.) Type of learning: Online Frequency: 6 terms/year
2013-2016	Instructor, HIM 6114 Integrated Electronic Medical Records, Morsani College of Medicine, University of South Florida, Tampa, Florida Level: Graduate Audience: General (Nurses, Physicians, Engineers, Administrators, etc.) Type of learning: Online Frequency: 6 terms/year
2014-Present	Instructor, HIM 6400/HIM 6664 Healthcare Project Management, Morsani College of Medicine, University of South Florida, Tampa, Florida Level: Graduate Audience: General (Nurses, Physicians, Engineers, Administrators, etc.) Type of learning: Online Frequency: 6 terms/year
2014-Present	Lecturer, SELECT II, Morsani College of Medicine, University of South Florida, Tampa, Florida Topics: Health informatics Level: Graduate Audience: Year 2 medical students and physicians Type of learning: In class Frequency: 2 terms/ year
2017 Spring	Lecturer, GMS6069, Morsani College of Medicine, University of South Florida, Tampa, Florida Topic: Health Informatics Level: Graduate Audience: Graduate Biotechnology students Type of learning: In class

Research Support

2009-2014

Proposal for Development of Evidence-based Clinical Decision Support System to Aid Prognostication in Terminally ill Patients
Sponsor: US Army Medical Research and Materiel Command. NO: W81XWH-09-2-0175
Role: Co-I
PI: Benjamin Djulbegovic
Funding amount: $4,295,000
Purpose: to develop computer decision-support system for better prognostication in life expectancy and improvement in decision-making in terminally ill patients.
Duties: Design, development, and maintenance of the data management system for patient data collection; analysis of collected data; design, development, and maintenance of the decision support system for hospice referral; design of the pain management module; research on medical decision making.
Publications: [3], [6], [8], [9], [14], [15], [23], [25], [26]

2010-2011

Design and Development of a Patient-Centric Diabetes Management System.
Sponsor: Bringing Science Home. HSC 6001100502
Co-PIs: L. Barnes and A. Tsalatsanis
Funding amount: $98,000
Purpose: To design a comprehensive patient-centric diabetes tool to enable patients with diabetes to cultivate positive behaviors towards their condition, and to develop a pilot software application platform that facilitates utilization of the tool.
Duties: Design and development of the mobile application; design of the protocols for the systematic review of evidence related to diabetes care; design of the application support website.
Publications: [24]

2009-2011

Treatment Success and Ethical Principle of Equipoise,
Sponsor: NIH/NCI, 1R01CA140408
Role: Co-I
PI: Benjamin Djulbegovic
Funding amount: $631,183
Purpose: to determine if the efficiency and patterns of clinical therapeutic discoveries reflect the ethical principle of equipoise.
Duties: Data management

2009-2011

Adolescent HIV/Aids Research Training

Sponsor: American Recovery and Reinvestment Act 3D43TW006793-03S1
Role: Co-I
PI: Patricia Emmanuel
Funding amount: $1,421,470
Purpose: to provide research training in the field of HIV/AIDS for medical personnel in India
Duties: Design and implementation of information systems for patient data collection.

Service

Committees

2011-2012	Scientific Review Committee, Center for Evidence Based Medicine (EBM), Clinical and Translational Science Institute (CTSI), Morsani College of Medicine, University of South Florida, Tampa, Florida
2013	Postdoctoral fellow search committee, CTSI, Morsani College of Medicine, University of South Florida, Tampa, Florida
2014-Present	Institutional Review Board, University of South Florida, Tampa Florida
2016-Present	Faculty Council, Treasurer, University of South Florida Health

Student advising

2011-2012	Student advising, Ryan Cartwright MSc student at Industrial Engineering, University of South Florida.
2012-2014	Dissertation committee, Eleazar Gil-Herrera, Ph.D. in Industrial Engineering, University of South Florida.
2012-2014	Student mentoring, Diego Martinez, Ph.D. student Industrial Engineering. Manuscript [16].
2013-2014	Student mentoring, Helen Mahony, Ph.D. student Public Health. Manuscript [13].

Peer review services

2011-Present	Regular reviewer for Annual conferences of the Engineers in Medicine and Biology Society
2012-Present	Regular reviewer for Sensors
2012-Present	Ad-hoc reviewer for Artificial Intelligence in Medicine

2010-Present	Ad-hoc reviewer for Journal of Defense Modeling and Simulation
2012-Present	Ad-hoc reviewer for Pervasive Healthcare
2012-Present	Ad-hoc reviewer for Pervasive and Mobile Computing
2014-Present	Ad-hoc reviewer for Jones & Bartlett Learning
2014-Present	Ad-hoc reviewer for BMC Medical Informatics and Decision Making
2015- Present	Ad-hoc reviewer for BMC Medical Education

Professional Association Memberships

2001	Technical Chamber of Greece
2005	Institute of Industrial Engineers
2010	Institute of Electrical And Electronics Engineers
2010	Engineers in Biomedicine Society
2013	American Medical Informatics Association