

## **CURRICULUM VITAE AND LIST OF PUBLICATIONS**

### **Personal Details**

Name: Aviv Segev  
Email: segev@southalabama.edu

### **Education**

Ph.D. 1999-2004 Tel-Aviv University, Technology and Information Systems  
Field: Artificial Intelligence / Information Retrieval  
"Context Recognition Using Multiple Knowledge Sources"

M.Sc. 1994-1997 Tel-Aviv University, Information Systems  
Field: Artificial Intelligence  
"Determining Placement of Systems Demarcated by Hemispheres"

B.Sc. 1990-1993 Bar-Ilan University, Mathematics Major, Political Science Minor

### **Employment History**

2021- Professor at the Department of Computer Science, School of Computing, University of South Alabama.

2018-2021 Associate Professor at the Department of Computer Science, School of Computing, University of South Alabama.

2017-2018 Visiting Scientist at Computer Science and Artificial Intelligence Laboratory (CSAIL), Massachusetts Institute of Technology (MIT).

2015-2017 Associate Professor at the Department of Knowledge Service Engineering, KAIST - Korea Advanced Institute of Science and Technology.

2014-2015 Visiting Scientist at Computer Science and Artificial Intelligence Laboratory (CSAIL), Massachusetts Institute of Technology (MIT).

2012-2014 Associate Professor at the Department of Knowledge Service Engineering, KAIST - Korea Advanced Institute of Science and Technology.

2009-2012 Assistant Professor at the Department of Knowledge Service Engineering, KAIST - Korea Advanced Institute of Science and Technology.

2007-2009 Assistant Professor at the Department of Management Information Systems, College of Commerce, National Chengchi University.

2004-2007 Post doctorate at the Technion, Israel Institute of Technology, research and development of algorithms for knowledge mining.

2003-2004 Visiting Lecturer at the University of Michigan – Dearborn (During PhD studies).

Aviv Segev

1999-2003 Entrepreneur and developer in a start-up specializing in creating 3D worlds using virtual reality.

1994-1999 Simulation project manager in the Israeli Aerospace Industry (IAI-MLM).  
Head of a software development team for a simulation project in the Arrow Defense Missile Project (IAI-MLM).  
Software programmer in IAI-MLM.

1992-1994 Mathematics Lecturer at Ariel University

## **Professional Activities**

### Editorial Board / Co-Editor / Chair / Member of Program Committee / Reviewer

2020-present - Patterns - Editorial Board

2023-present - Scientific Reports - Editorial Board

2019-2020 - IEEE Big Data Workshop on Predictive Maintenance Using AI - Chair

2019 - AMCIS Social Media Platforms for E-Commerce Mini-track – Co-Chair

2016-present - International Journal of Internet of Things and Big Data - Editorial Board

2017 - Services Conference Federation (SCF) - Tutorial Chair

2016-present - International Conference on Internet of Things and Big Data - Program Committee Member

2012-present - International Asia-Pacific Web Conference (APWeb) - Program Committee Member

2018 - CIoTS Workshop on Context-Aware and IoT Services - Program Committee Member

2023-present - Expert Systems with Applications - Reviewer

2019 - ACM Transactions on Intelligent Systems and Technology - Reviewer

2017 - ACM Transactions on Software Engineering and Methodology - Reviewer

2015-2016 - SERVICES - Services Education Summit Chair

2015-present - International Conference on Web Services - Reviewer

2016 - IEEE Systems, Man and Cybernetics: Systems - Reviewer

2016-present - Knowledge Based Systems - Reviewer

2022-present - Transactions on Affective Computing - Reviewer

2022-present - Artificial Intelligence Review - Reviewer

2016 - IEEE Intelligent Systems - Reviewer

2015-2017 - International Journal on Semantic Web and Information Systems (IJSWIS) - Reviewer

2015 - International Conference on Future Internet of Things and Cloud - Program Committee

Aviv Segev

- 2015 - Journal of Cleaner Production - Special Volume on Innovative Products and Services for Sustainable Development - Co-Editor
- 2015 - Journal of Artificial Intelligence Review - Reviewer
- 2015 - LNCS Transactions on Large-Scale Data and Knowledge Centered Systems (TLDKS) - Reviewer
- 2013-2014 - IEEE International Workshop on Future Services (FS) - Program Chair
- 2014 - International Conference on Knowledge Management (ICKM) - Program Committee Member
- 2014 - IEEE Transactions on Knowledge and Data Engineering - Reviewer
- 2014 - IEEE Transactions on Software Engineering - Reviewer
- 2013-2014 - Computers & Education - Reviewer
- 2014 - Service Oriented Computing and Applications - Reviewer
- 2012-2013 - International Conference on Signal Image Technology & Internet Based Systems (IEEE SITIS) - Program Committee Member
- 2012-2019 - Knowledge and Information Systems - Reviewer
- 2012-2019 - IEEE Transactions on Services Computing - Reviewer
- 2021-present - Neural Computing and Applications - Reviewer
- 2012 - IEEE International Conference on e-Business Engineering (ICEBE) - Program Committee Member
- 2012 - AMCIS Mini-track on Service Mining: Technology, Management and Application - Program Committee Member
- 2022-present - Journal of Informatics - Reviewer
- 2022-present - Journal of Information Science - Reviewer
- 2011 - Expert Systems Journal - Reviewer
- 2011-present - Information Sciences Journal - Reviewer
- 2011-2014 - Workshop on Personalization in Cloud and Service Computing - Program Committee Member
- 2011 - ACM Transactions on Internet Technology (TOIT) Journal - Reviewer
- 2011 - International Journal of Pervasive Computing and Communications - Reviewer
- 2011 - International Journal of Cooperative Information Systems - Reviewer
- 2011-present - International Conference on Service Oriented Computing (ICSOC) - Program Committee Member
- 2010 - International Journal of Semantic Web and Information Systems (IJSWIS) - Reviewer
- 2010 - International Computer Symposium (ICS) - Reviewer
- 2010-2019 - World Wide Web Journal – Reviewer

Aviv Segev

2019 - Chaos: Journal of Nonlinear Science - Reviewer

2010 - International Workshop on Personalization in Grid, Service and Cloud Computing (PGSC) - Program Committee Member

2010-2011 - International Symposium on Web and Mobile Information Services (WAMIS) - Program Committee Member

2009 - Enabling Context-Aware Web Services: Methods, Architectures, and Technologies, Chapman and Hall/CRC Press - Reviewer

2009-2011 - Risk Management and Cyber-Informatics (RMCI) - Reviewer

2009 - International Conference of Electronic Commerce (ICEC-09) - Reviewer

2009-2011 - International Conference on Information Technology: New Generations (ITNG) - Program Committee Member

2008 - Web-Based Information Technologies & Distributed Systems (WITDS) track in the International Conference on Signal-Image Technology & Internet Based Systems (IEEE SITIS) - Program Committee Member

2008 - International Congress on Pervasive Computing and Management (ICPCM 2008) - Advisory Board

2006-2008 - Workshop on Contexts and Ontologies: Theory, Practice and Applications - C&O - Program Committee Member

2007-2008 - International Journal of Electronic Business (IJEB) – Reviewer

2018 - Technology Analysis & Strategic Management– Reviewer

2006 - Knowledge Engineering Review Journal (KER) - Reviewer

2004-2018 - Americas Conference on Information Systems – AMCIS - Reviewer

#### Memberships in professional/scientific associations

2013-2020 - ACM Member

2010-2022 - IEEE Member

2005-2006 - European Coordinating Committee for Artificial Intelligence (ECCAI)

2005-2007 - Israeli Association for Artificial Intelligence (IAAI)

2005-2023 - American Association for Artificial Intelligence (AAAI)

2004 - Association for Information Systems (AIS)

#### **Educational Activities - Courses Taught**

- Advanced AI Theory and Programming, Undergraduate/Graduate, University of South Alabama
- Web Technologies and Knowledge Modeling, Undergraduate/Graduate, University of South Alabama
- AI Theory and Programming, Undergraduate/Graduate, University of South Alabama

Aviv Segev

- Programming Languages, Undergraduate, University of South Alabama
- Knowledge Structures and Modeling, Graduate, KAIST
- Knowledge Service Design Using Web Technologies, Graduate, KAIST
- Mobile Services and Solutions Development, Graduate, National Chengchi University.
- Web Technologies, Graduate, National Chengchi University.
- Java Programming, Undergraduate, National Chengchi University.
- Information Systems Design and Implementation, Undergraduate, Technion – Israel Institute of Technology.
- Information Systems Development, Graduate, University of Michigan – Dearborn.
- Introduction to Management Information Systems, Graduate, University of Michigan – Dearborn.
- Computer and Information Systems, Programming and Data Structures, Graduate, University of Michigan – Dearborn.
- Information Systems in Management, Undergraduate, University of Michigan – Dearborn.
- Information Systems, Implementation and Management, Undergraduate, University of Michigan – Dearborn.

## **Research Interests**

Knowledge Modeling, Knowledge Processing, and Knowledge Mapping:

- Methods to model knowledge
- Generalization of basic knowledge structure
- Platform independent knowledge processing mechanisms
- Analysis of high level knowledge processing
- Identification of rules that govern knowledge activity

## **Awards and Fellowships**

2013 - Best Student Paper Award - International Conference on Information Systems for Crisis Response and Management (ISCRAM-13), Baden-Baden, Germany, May 12-15, 2013.

1999 - 2003:

- Council for Higher Education Scholarship for Excelling Doctorate Students in Elite Technology.
- The Marcel and Annie Adams Institute for Business Management Information Systems Faculty of Management, Tel Aviv University - Scholarship Award.

## **Research Grants**

- November 2023 - December 2025, DoD, “Orion”, Project Fund: 7,300,000 USD, Co-Principal Investigator.
- October 2023 - September 2025, DoD, “Moon Pie”, Project Fund:4,000,000 USD.
- October 2021 - September 2023, DoD, “Typhoon”, Project Fund: 8,000,000 USD.

- August 2020 - July 2022, DoD, “Counterfeit Chip Detection Using Data Driven Computational Intelligence”, Project fund: 350,000 USD, Principal Investigator.
- January 2019 - December 2021, DoI, Contract #140D0419-9-0004, Project fund: 7,100,000 USD.
- September 2019 - August 2020, US NSF, IUCRC, “Deep Neural Networks for Forensic and Industry Classification”, Project fund: 25,000 USD, Principal Investigator.
- August 2019 - July 2020, US NSF, IUCRC, “Big Data Driven Optimization for Aviation and Missile”, Project fund: 25,000 USD, Principal Investigator.
- December 2016 - August 2017, Korea NRF, “Digital Companion”, Project fund: 20,000,000,000 Won, project share: 200,000,000 Won per year.
- July 2016 - June 2019, Korea NRF, “Knowledge Development Models based on Neuronal Activity”, Project fund: 300,000,000 Won, Principal Investigator.
- June 2016 - August 2017, KAIST Grand Challenge 30, “KC30”, Project fund: 15,000,000 Won, Principal Investigator.
- November 2016, Prediction Model for Evaluation of Railway Driving Performance, Korea Railroad Research Institute, 2,500,000 Won, Principal Investigator.
- September 2013 - August 2018, Korean Science Foundation, “BK21”, Project fund: 80,000,000 Won per year, project share: 20,000,000 Won per year.
- August 2013 - July 2018, Korean Science Foundation, “ExoBrain”, Project fund: 107,000,000,000 Won, Subproject share: 30,000,000 Won per year.
- April 2010 - April 2014, Korean Ministry of Knowledge Economy, “E-Learning Project” Project fund: 1,000,000,000 Won per year, Subproject share: 20,000,000 Won per year.
- April 2008 - March 2009, Wen Foundation, “U2.0: SSME-Supported U-Society Services for Successful U-Taiwan” Project fund: NT\$10,000,000, “U2.0 Semantic Service Composition” Subproject share: NT\$600,000.
- December 2008 – June 2009, National Science Council (NSC), Taiwan, “E-Business Service Semantic Classification and Retrieval”, NT\$ 538,000, Principal Investigator.

## Publications

(\* Corresponding author or student/postdoc advisor)

### Refereed Articles in Scientific Journals

1. Riedel R., **Segev A.\***, Neural Network Structure Simplification by Assessing Evolution in Node Weight Magnitude, Machine Learning, 2023.
2. **Segev A.\***, Jung S., Common Knowledge Processing Patterns in Networks of Different Systems, PLoS One, 18(10), 2023.
3. Pomerat J., **Segev A.\***, A Comparison of Methods for Neural Network Aggregation, Advances in Artificial Intelligence and Machine Learning, 3, 2023.
4. Jung, S., **Segev A.\***, DAC: Descendant-Aware Clustering Algorithm For Network-Based Topic Emergence Prediction, Journal of Informetrics, 16(3), 2022.

5. Jung, S., **Segev A.\***, Identifying A Common Pattern Within Ancestors of Emerging Topics for Pan-Domain Topic Emergence Prediction, Knowledge-Based Systems, 258, 2022.
6. Jung, S., **Segev A.\***, Analyzing the Generalizability of the Network-Based Topic Emergence Identification Method, Semantic Web, 13(3), pp. 423-439, 2022.
7. Balili C., Lee U., **Segev A.\***, Kim J., Ko M., TermBall: Tracking and Predicting Evolution Types of Research Topics by Using Knowledge Structures in Scholarly Big Data, IEEE Access, 8, pp. 108514-108529, 2020.
8. Carson J., Hollingsworth K., Datta R., **Segev A.\***, Failing And Not Falling (F&!F): Data-Enabled Classification Learning of Aircraft Accidents and Incidents, Data-Enabled Discovery and Applications, 4(9), 2020.
9. Jung, S., Kandadi, R. R., Datta R., Benton R., **Segev A.\***, Identification of Technology-Relevant Entities Based on Trend Curves and Semantic Similarities, International Journal of Web & Semantic Technology (IJWesT), 11(3), pp. 1-16, 2020.
10. Fouts, C., Pal, P., Datta, R., **Segev A.\***, CPU Hardware Classification and Performance Prediction Using Neural Networks and Statistical Learning, International Journal of Artificial Intelligence & Applications (IJAIA), 11(4), pp. 1-13, 2020.
11. **Segev A.\***, Curtis D., Balili C., and Jung S., Neuronless Knowledge Processing in Forests, Applied Sciences, 10 (7), 2020.
12. Choi S., **Segev A.\***, Finding Informative Comments for Video Viewing, SN Computer Science, 1(47), 2020.
13. **Segev A.\***, Curtis D., Jung S., and Chae S., Invisible Brain: Knowledge in Research Works and Neuron Activity, PLoS One, 11(7), 2016.
14. Chae S., **Segev A.\***, and Lee U., Cannibalism in Medical Topic Networks, Knowledge-Based Systems, 108, pp. 168-178, 2016.
15. Ko M., Choi S., Lee J., Yang S., Lee U., **Segev A.**, Understanding Mass Interactions in Online Sports Viewing, ACM Transactions on Computer-Human Interaction, 23(1), 2016.
16. **Segev A.\***, Jung S., and Choi S., Analysis of Technology Trends Based on Diverse Data Sources, IEEE Transactions on Services Computing, 8(6), pp. 903-915, 2015.
17. Yao L., Sheng Q. Z., Ngu A. H. H., Yu J., and **Segev A.**, Unified Collaborative and Content-Based Web Service Recommendation, IEEE Transactions on Services Computing, 8(3), pp. 453-466, 2015.
18. Jung S. and **Segev A.\***, Analyzing Future Communities in Growing Citation Networks, Knowledge-Based Systems, 69, pp. 34-44, 2014.
19. Jihan S. H. and **Segev A.\***, Humanitarian Assistance Ontology for Emergency Disaster Response, IEEE Intelligent Systems, 29(3), pp. 6-13, 2014.

20. Jang Y. J., Tsay O., Murale D., Jeong A. J., **Segev A.**, and Churchill D. G., Novel and selective detection of Tabun mimics, *Chemical Communications*, 50, pp. 7531-7534, 2014.
21. **Segev A.\***, Kantola J., Jung C., and Lee J. H., Analyzing Multilingual Knowledge Innovation in Patents, *Expert Systems with Applications (ESWA)*, 40, pp. 7010-7023, 2013.
22. Singh A. P., Murale D. P., Ha Y., Liew H., Lee K. M., **Segev A.**, Suh Y. H., and Churchill D. G., Novel, Selective, and Extremely Responsive Thienyl-based Dual Fluorogenic Probe for Tandem Superoxide and Hg<sup>2+</sup> Chemosensing, *Dalton Transactions*, 42, pp. 3285-3290, 2013.
23. **Segev A.\*** and Kantola J., Identification of Trends from Patents Using Self-Organizing Maps, *Journal of Expert Systems with Applications (ESWA)*, 39, pp. 13235-13242, 2012.
24. Lee J. H. and **Segev A.\***, Knowledge Maps for e-Learning, *Computers & Education*, 59(2), pp. 353-364, 2012.
25. **Segev A.\*** and Sheng Q. Z., Bootstrapping Ontologies for Web Services, *IEEE Transactions on Services Computing*, 5(1), pp. 33-44, 2012.
26. **Segev A.\*** and Kantola J., Patent Search Decision Support Service, *Service Science Journal*, 2(1), pp. 1-8, 2011.
27. Sheng Q. Z., Yu J., **Segev A.**, and Liao K., Techniques on Developing Context-Aware Web Services, *International Journal of Web Information Systems*, 6(3), pp. 185-202, 2010.
28. **Segev A.\***, Integrating Computer Vision with Web Based Knowledge for Medical Diagnostic Assistance, *Expert Systems*, 27(4), pp. 247-258, 2010.
29. **Segev A.\*** and Toch E., Context-Based Matching and Ranking of Web Services for Composition, *IEEE Transactions on Services Computing*, 2(3), pp. 210-222, 2009.
30. **Segev A.\***, Adaptive Ontology Use for Crisis Knowledge Representation, *International Journal of Information Systems for Crisis Response and Management*, 1(2), pp. 16-30, 2009.
31. **Segev A.\*** and Gal A., Enhancing Portability with Multilingual Ontology-Based Knowledge Management, *Decision Support Systems (DSS)*, 45(3), pp. 567-584, 2008.
32. **Segev A.\*** and Gal A., Putting Things in Context: An Algorithmic Approach to Mapping Contexts to Ontologies, *Journal of Data Semantics (JoDS)*, IX, pp. 113-140, 2007.
33. **Segev, A.\***, Leshno M., and Zviran M., Context Recognition Using Internet as a Knowledge Base, *Journal of Intelligent Information Systems (JIIS)*, 29(3), pp. 305-327, 2007.
34. **Segev, A.\***, Leshno M., and Zviran M., Internet as a Knowledge Base for Medical Diagnostic Assistance, *Expert Systems with Applications (ESWA)*, 33(1), pp. 251-255, 2007.



35. **Segev A.\*** and BenBassat M., Determining Placement of Systems Demarcated by Hemispheres, International Journal of Pure and Applied Mathematics, 38(2), pp, 187-198, 2007.

#### Chapters in Books

1. Kantola J. and **Segev A.**, Simulating Patent Knowledge Contexts, Recent Progress in Data Engineering and Internet Technology, Springer-Verlag, Lecture Notes in Electrical Engineering, Vol. 156, pp. 329–336, 2013.
2. **Segev A.\***, Semantic Web: Ontological Engineering for Knowledge Services, Knowledge Service Engineering, Taylor & Francis Group, 2012.
3. **Segev A.\***, Multilingual Crisis Knowledge Representation, Crisis Response and Management and Emerging Information Systems: Critical Applications, IGI Global, 2011.
4. **Segev A.\***, Circular Context-Based Semantic Matching to Identify Web Service Composition, Context enabled Source and Service Selection, Integration and Adaption (CSSSIA), ACM, Volume 292, 2008.
5. **Segev A.\***, Identifying the Multiple Contexts of a Situation, Modeling and Retrieval of Context, Springer-Verlag, Lecture Notes in Computer Science, Volume 3946, April 2006, pp. 118-133.
6. Gal A., **Segev A.**, Tatsiopoulos C., Sidiropoulos K., Georgiades P., Agent Oriented Data Integration, Lecture Notes in Computer Science, Volume 3770, Oct 2005, pp. 98-108.

#### Keynote Speaker

- 17<sup>th</sup> Conference on Information Management & Practice (IMP 2011), Tainan, Taiwan, December 9-10, 2011

#### Articles in Conferences/Workshops Proceedings

1. Riedel R., **Segev A.\***, Neural Network Structure Simplification by Assessing Evolution in Node Weight Magnitude, Proceedings of Asian Conference on Machine Learning (ACML 2023), Istanbul, Turkey, November 11-14, 2023.
2. Warnakulasooriya K., Benton R., **Segev A.\***, Priority Basis Task Allocation for Drone Swarms, Proceedings of AAAI Conference on Artificial Intelligence Workshop on Multi-Agent Path Finding, Washington, DC, USA, February 7-14, 2023.
3. Jung S., **Segev A.\***, Semantic Similarity Analysis between Future Topics and Their Neighbors in Topic Networks for Network-based Topic Evolution, Proceedings of IEEE Big Data Special Session on Intelligent Data Mining, Osaka, Japan, December 17-20, 2022.
4. Jung S., **Segev A.\***, Optimizing the Descendant-Aware Clustering Parameters, Proceedings of IEEE Big Data Workshop on Knowledge Graphs and Big Data, Osaka, Japan, December 17-20, 2022.

5. Kumar A., **Segev A.\***, Bayesian Ensembled Knowledge Extraction Strategy for Online Portfolio Selection, Proceedings of IEEE Big Data Workshop on Big Data for Economic and Business Forecasting, Osaka, Japan, December 17-20, 2022.
6. Jung S., Fouts C., Nice F., Edstrom I., **Segev A.\***, Multi-Objective Counterfeit Circuit Detection, Proceedings of IEEE SSCI Symposium Series on Computational Intelligence, Singapore, December 4-7, 2022.
7. Pomerat J., **Segev A.\***, A Comparison of Methods for Neural Network Aggregation, Proceedings of International Conference on Learning Representations (ICLR), Sydney, Australia, December 2-3, 2021.
8. Carson, J., Hollingsworth K., Datta R., Clark G., **Segev A.\***, A Hybrid Decision Tree-Neural Network (DT-NN) Model for Large-Scale Classification Problems, Proceedings of IEEE Big Data Workshop on Big Data Predictive Maintenance using Artificial Intelligence, Virtual, December 10-13, 2020.
9. Roberts H., **Segev A.\***, Animal Behavior Prediction with Long Short-Term Memory, Proceedings of IEEE Big Data Workshop on Big Data Predictive Maintenance using Artificial Intelligence, Virtual, December 10-13, 2020.
10. Jung S., Datta R., **Segev A.\***, Identification and Prediction of Emerging Topics through Their Relationships to Existing Topics, Proceedings of IEEE Big Data Special Session on Machine Learning on Big Data, Virtual, December 10-13, 2020.
11. Jung S., Datta R., **Segev A.\***, An Automatic Classification of the Primary and the Corresponding Authors in Research Articles, Proceedings of IEEE Big Data Special Session on Intelligent Data Mining, Virtual, December 10-13, 2020.
12. Jung S., Kandadi, R. R., Datta R., Benton R., **Segev A.\***, Identification of Technology-Relevant Entities Based on Trend Curves, Proceedings of International Conference on Information Technology Convergence and Services, Vancouver, Canada, May 30-31, 2020.
13. Fouts C., Pal P., Datta R., **Segev A.\***, Classification of Computer Hardware and Performance Prediction Using Statistical Learning and Neural Networks, Proceedings of International Conference on Artificial Intelligence and Machine Learning, Vancouver, Canada, May 30-31, 2020.
14. Pomerat J., **Segev A.\***, Datta R., On Neural Network Activation Functions and Optimizers in Relation to Polynomial Regression, Proceedings of IEEE Big Data Poster Session, Los Angeles, California, USA, December 9-12, 2019.
15. Carson J., Hollingsworth K., Datta R., **Segev A.\***, Failing & !Falling (F&!F): Learning to Classify Accidents and Incidents in Aircraft Data, Proceedings of IEEE Big Data Workshop on Big Data Predictive Maintenance using Artificial Intelligence, Los Angeles, California, USA, December 9-12, 2019.
16. **Segev A.\***, Datta R., Benton R., Curtis D., OINNIONN - Outward Inward Neural Network and Inward Outward Neural Network Evolution, Proceedings of Genetic and Evolutionary Computation Conference (GECCO), July 13-17, 2019.
17. Pal P., Datta R., Rajbans D., **Segev A.\***, A Neural Net based prediction of sound pressure level for the design of Aerofoil, Proceedings of Fuzzy And Neural Computing Conference (FANCCO), Maribor, Slovenia, EU, July 10-12, 2019.

18. Pandey S. R., Datta R., **Segev A.**, Bhattacharya B., Evolutionary Bi-Objective Optimization and Knowledge Extraction for Electronic and Automotive Cooling, Proceedings of Swarm, Evolutionary and Memetic Computing Conference (SEMCCO), Maribor, Slovenia, EU, July 10-12, 2019.
19. Gupta J., Datta R., Sharma A. K., **Segev A.**, Bhattacharya B., Feedback Control of a Lower Limb Exoskeleton System by Determining Optimal LQR Weighting Matrices using Evolutionary Multi-objective Optimization, Proceedings of International Conference on Computational Science and Engineering (IEEE CSE), New York, New York, USA, August 1-3, 2019.
20. Pal P., Datta R., **Segev A.\***, Yasinsac A., Condition Based Maintenance of Turbine and Compressor of a CODLAG Naval Propulsion System using Deep Neural Network, Proceedings of International Conference on Artificial Intelligence and Applications (AIAP-2019), Vancouver, Canada, May 25~26, 2019.
21. Buduma N., **Segev A.\***, Curtis D., Combining Neural Nets, Proceedings of American Medical Informatics Association (AMIA) Symposium, Washington DC, USA, November 13, 2019.
22. Kim J., **Segev A.\***, Research Hypothesis Generation Using Link Prediction in a Bipartite Graph, Proceedings of IEEE Big Data Workshop on Big Data Analytic Technology for Bioinformatics and Health Informatics, Seattle, Washington, USA, December 9-13, 2018.
23. Balili C., **Segev A.\***, Lee U., Tracking and Predicting the Evolution of Research Topics in Scientific Literature, Proceedings of IEEE Big Data, Boston, MA, USA, December 11-14, 2017.
24. Jung C., Datta R., **Segev A.\***, Multi-document Summarization using Evolutionary Multi-Objective Optimization, Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Berlin, Germany, July 15-19, 2017.
25. **Segev A.\***, Curtis D., Jung S., and Chae S., Invisible Brain: Knowledge in Research Works and Neuron Activity, Proceedings of AAAI Spring Symposium, Palo Alto, California, USA, March 27-29, 2017.
26. Datta R., Deb K., **Segev A.\***, A Bi-objective Hybrid Constrained Optimization (HyCon) Method Using a Multi-Objective and Penalty Function Approach, IEEE CEC Congress on Evolutionary Computation, Donostia - San Sebastián, Spain, June 5-8, 2017
27. Jung C., Datta R., **Segev A.\***, Automatic Text Summarization with Multi-objective Optimization (ATS-MOO), Proceedings of Global Optimization Conference (GOC-2017), College Station, Texas, USA, March 30 - April 1, 2017.
28. Datta R., Pandey S. R., **Segev A.\***, Multi-Objective Optimization and Knowledge Extraction of Plate-Fin Heat Sink Using Evolutionary Algorithms, Proceedings of Global Optimization Conference (GOC-2017), College Station, Texas, USA, March 30 - April 1, 2017.
29. Kim H., Molefi L., Kim A., Woo W., **Segev A.**, Lee U., It's More than Just Sharing Game Play Videos! Understanding User Motives in Mobile Game Social Media, CHI, Denver, Colorado, USA, May 6-11, 2017.

30. Kim S., Kalenzi A. E. P., Kim A., Lee K-P., **Segev A.**, Lee U., Sensors Know Which Photos Are Memorable, CHI, Denver, Colorado, USA, May 6-11, 2017.
31. Choi S-W., **Segev A.\***, Finding Informative Comments for Video Viewing, Proceedings of IEEE International Conference on Big Data (IEEE BigData 2016) Workshop of Application of Big Data for Computational Social Science, Washington DC, USA, December 5-8, 2016.
32. Jung S., Lai T. M., **Segev A.\***, Analyzing Future Nodes in a Knowledge Network, Proceedings of IEEE International Congress on Big Data, San Francisco, USA, June 27 - July 2, 2016.
33. Ko M., Choi S-W., Lee J., Yang S., Lee U., **Segev A.**, and Song J., Motives for Mass Interactions in Online Sports Viewing, Proceedings of World Wide Web Conference (WWW 2014), Seoul, Korea, April 17-11, 2014.
34. Jung S., **Segev A.\***, Analyzing Future Communities in Growing Citation Networks, Proceedings of ACM International Conference on Information and Knowledge Management (CIKM 2013) International Workshop on Mining Unstructured Big Data using Natural Language Processing, Burlingame, CA, USA, October 27-November 1, 2013.
35. **Segev A.\***, Jung C., Jung S., Analysis of Technology Trends Based on Big Data, IEEE International Congress on Big Data, Santa Clara, CA, USA, June 27-July 2, 2013.
36. Yao L., Sheng Q. Z., **Segev A.**, Yu J., Recommending Web Services via Combining Collaborative Filtering with Content-based Features, IEEE International Conference on Web Services, Santa Clara, CA, USA, June 27-July 2, 2013.
37. Jihan S. H. and **Segev A.\***, Context Ontology for Humanitarian Assistance in Crisis Response, Proceedings of International Conference on Information Systems for Crisis Response and Management (ISCRAM-13), Baden-Baden, Germany, May 12-15, 2013. (**Best Student Paper Award**).
38. **Segev A.\***, Temporal Term Frequency Analysis of Technology, 14th International Conference on Artificial Intelligence (ICAI'12), Las Vegas, USA, July 16-19, 2012.
39. Lee J. H. and **Segev A.\***, Knowledge Maps for e-Learning, World Conference on E-Learning in Corporate, Government, Healthcare & Higher Education (E-LEARN 2011), Honolulu, Hawaii, USA, October 17-21, 2011.
40. Lee J. H. and **Segev A.\***, Information Learning with Knowledge Maps, Israel Association for Information Systems Conference (ILAIS 2010), Raanana, Israel, June 29, 2011.
41. **Segev A.\*** and Kantola J., Patent Service Self Organizing Maps, Proceedings of International Conference on Information Technology: New Generations (ITNG 2011), Las Vegas, Nevada, USA, April 11-13, 2011.
42. Kantola J. and **Segev A.**, Simulating Patent Knowledge Contexts, International Conference on Data Engineering and Internet Technology (DEIT 2011), Bali, Indonesia, March 15-17, 2011.
43. **Segev A.\*** and Kantola J., Multilingual Patent Knowledge Discovery, Proceedings of International Computer Symposium (ICS), Tainan, Taiwan, December 16-18, 2010.

44. **Segev A.\*** and Kantola J., Knowledge Discovery Systems for Patents, Proceedings of International Conference on Knowledge Management (ICKM 2010), Pittsburgh, Pennsylvania, USA, October 22-23, 2010.
45. **Segev A.\*** and Kantola J., Patent Search Decision Support Service, Proceedings of International Conference on Information Technology: New Generations (ITNG 2010), Las Vegas, Nevada, USA, April 12-14, 2010.
46. **Segev A.\*** and Sheng Q. Z., Ontology Construction for Web Services, Proceedings of ISWC Workshop on Ontology Patterns (WOP 2009), Washington, DC, USA, 25-29 October 2009.
47. **Segev A.\***, Knowledge Management for Rapid Response, IOneWorld2009, Las Vegas, USA, April 15-17, 2009.
48. **Segev A.\***, U2.0 Semantic Service Composition, International Symposium of Service Innovation and Service Science, Taipei, Taiwan, January 6-7, 2009.
49. **Segev A.\***, Multilingual Knowledge Management for Crisis, Proceedings of International Conference on Electronic Business (ICEB'08), Waikoloa, Hawaii, USA, September 30 - October 3, 2008.
50. **Segev A.\***, Circular Context-Based Semantic Matching to Identify Web Service Composition, Context enabled Source and Service Selection, Integration and Adaption (CSSSIA) workshop in World Wide Web Conference, Beijing, China, April 22, 2008.
51. **Segev A.\***, Adaptive Ontology Use for Crisis Knowledge Representation, Proceedings of International Conference on Information Systems for Crisis Response and Management (ISCRAM-08), Washington, D.C., USA, May 4-7, 2008.
52. **Segev A.\*** and Toch E., E-Business Service Semantic Classification and Retrieval, Proceedings of International Conference on Electronic Business (ICEB'07), Taipei, Taiwan, December 2-6, 2007.
53. Gal A., **Segev A.**, and Toch E., Semantic Methods for Service Categorization - An Empirical Study, Proceedings of VLDB International Workshop on Semantic Data and Service Integration (SDSI'07), Vienna, Austria, September 23, 2007.
54. **Segev A.\*** and Gal A., Puzzling It Out: Supporting Ontology Evolution with Applications to eGovernment, Proceedings of International Joint Conferences on Artificial Intelligence (IJCAI) Workshop on Modeling and Representation in Computational Semantics, Hyderabad, India, January 6-12, 2007.
55. **Segev A.\*** and Gal A., Ontology Verification Using Contexts, Proceedings of European Conference on Artificial Intelligence (ECAI-06) Workshop on Contexts and Ontologies: Theory, Practice and Applications (C&O-2006), Riva del Grada, Italy, August 28, 2006.
56. **Segev A.\*** and Shimshoni I., Integration of Computer Vision and Context Recognition, Proceedings of WWW2006 Workshop: Information Integration on the Web, Edinburgh, Scotland, May 22, 2006.
57. Gal A. and **Segev A.**, Putting Things in Context: Dynamic eGovernment Re-Engineering using Ontologies and Context, WWW2006 Workshop: The E-Government: Barriers and Opportunities, Edinburgh, Scotland, May, 2006.

58. **Segev A.\***, Identifying the Multiple Contexts of a Situation, Proceedings of International Joint Conferences on Artificial Intelligence (IJCAI) Workshop on Modeling and Retrieval of Context, Edinburgh Scotland, 30 July - 5 August 2005.
59. **Segev A.\*** and Gal A., Putting Things in Context: An Algorithmic Approach to Mapping Ontologies and Contexts, Proceedings of the American Association of Artificial Intelligence (AAAI) Workshop on Contexts and Ontologies: Theory, Practice and Applications. Pittsburgh, USA, July 9-13, 2005.
60. **Segev A.\***, Automated Context Recognition: An Algorithmic Approach. International and Interdisciplinary Conference on Modeling and Using Context (CONTEXT'05) Demonstration Program. Paris, France July 6-8, 2005.
61. **Segev A.\*** and Gal A., eGovernment Policy Evaluation Support using Multilingual Ontologies, Proceedings of the Observatory on Interoperable eGovernment Services: eGov-Interop'05 Annual Conference, Geneva, Switzerland, February 23-25, 2005.

#### Invited Talks

- 7/6/2023 - Fairhope Public Library - AI and I
- 7/5/2023 - Mobile Optimist Club - AI and I
- 6/23/2023 - PRCA Toolkit Conference - AI and I
- 10/1/2021 - Dauphin Island Sea Lab - Fishing for AI

#### Seminar Presentations at Universities

- 2017, University of Illinois at Urbana-Champaign, US
- 2017, Norwegian University of Science and Technology, Norway
- 2017, Yeshiva University, US
- 2017, Brandeis University, US
- 2017, University of Texas at Arlington, US
- 2015, University of Miami, US
- 2015, Mayo Clinic, US
- 2013, Kyung Hee University, Suwon, Korea
- 2012, MIT, Boston, US
- 2012, Bar-Ilan University, Israel
- 2011, University of Tel-Aviv, Israel
- 2006, Ben-Gurion University, Israel
- 2006, Haifa University, Israel
- 2005, University of Manchester, Manchester, England

Aviv Segev

- 2005, Technion – Israel Institute of Technology, Israel

Academic Thesis/Dissertation

- **Segev, A.** (2004), Context Recognition Using Multiple Knowledge Sources, Ph.D. Dissertation, Tel Aviv University.
- **Segev, A.** (1997). Determining Placement of Systems Demarcated by Hemispheres, M.Sc. Thesis, Tel Aviv University.