Stanford



Mykel Kochenderfer

Associate Professor of Aeronautics and Astronautics, Senior Fellow at the Stanford Institute for Human-Centered AI and Associate Professor, by courtesy, of Computer Science

CONTACT INFORMATION

- **Administrator**

  Corinna Haussecker - Administrative Associate

  Email chaussec@stanford.edu

  Tel (650) 723-2107

Bio

BIO

Mykel Kochenderfer is Associate Professor of Aeronautics and Astronautics at Stanford University. Prior to joining the faculty, he was at MIT Lincoln Laboratory where he worked on airspace modeling and aircraft collision avoidance, with his early work leading to the establishment of the ACAS X program. He received a Ph.D. from the University of Edinburgh and B.S. and M.S. degrees in computer science from Stanford University. Prof. Kochenderfer is the director of the Stanford Intelligent Systems Laboratory (SISL), conducting research on advanced algorithms and analytical methods for the design of robust decision making systems. Of particular interest are systems for air traffic control, unmanned aircraft, and other aerospace applications where decisions must be made in uncertain, dynamic environments while maintaining safety and efficiency. Research at SISL focuses on efficient computational methods for deriving optimal decision strategies from high-dimensional, probabilistic problem representations. He is an author of "Decision Making under Uncertainty: Theory and Application" (2015), "Algorithms for Optimization" (2019), "Algorithms for Decision Making" (2022), and "Algorithms for Validation" (2026), all from MIT Press. He is a third generation pilot.

ACADEMIC APPOINTMENTS

- Associate Professor, Aeronautics and Astronautics
- Senior Fellow, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Co-Director, Center for AI Safety, (2018- present)
- Director, SAIL-Toyota Center for AI Research, (2018-2023)

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance
- Symbolic Systems Program

PROFESSIONAL EDUCATION

- Ph.D., University of Edinburgh , Informatics (2006)
- M.S., Stanford University , Computer Science (2003)
- B.S., Stanford University , Computer Science (2003)

LINKS

- Personal site: https://mykel.kochenderfer.com
- Lab site: https://sisl.stanford.edu
- Research Video: https://youtu.be/WHdLmVmzZdw

Teaching

COURSES

2026-27

- Advanced Topics in Sequential Decision Making: AA 229, CS 239 (Win)
- Artificial Intelligence and Society: MLA 373 (Win)
- Decision Making under Uncertainty: AA 228, CS 238 (Aut)
- Engineering Design Optimization: AA 222, CME 222, CS 361 (Spr)

2025-26

- Decision Making under Uncertainty: AA 228, CS 238 (Aut)
- Engineering Design Optimization: AA 222, CME 222, CS 361 (Spr)

2024-25

- Building Trust in Autonomy: AA 120Q (Win)
- Decision Making under Uncertainty: AA 228, CS 238 (Aut)
- Engineering Design Optimization: AA 222, CME 222, CS 361 (Spr)
- Technology and Society in Argentina: OSPGEN 65 (Sum)
- Validation of Safety Critical Systems: AA 228V, CS 238V (Win)

2023-24

- Advanced Topics in Sequential Decision Making: AA 229, CS 239 (Win)
- Decision Making under Uncertainty: AA 228, CS 238 (Aut)
- Engineering Design Optimization: AA 222, CS 361 (Spr)
- Engineering and Technology in India: OSPGEN 20 (Sum)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Maximilian Adang, Toby Bell, Hugo Buurmeijer, Polo Contreras, Aaron Feldman, Janelle Kaneda, Brian Munguía, Lavinia Pedrollo, Christian Porrello, Lou Sacchettini, Jiankai Sun, Garrett Thomas

Postdoctoral Faculty Sponsor

Laura Luetzow, Marc Schlichting, Lara Weed, Aolin Xu, Linfeng Zhao

Doctoral Dissertation Advisor (AC)

Mahdi Al-Husseini, Michelle Ho, Grace Kim, Bill Kuhl, Anka Reuel, Isaac Ward, Hailey Warner, Ryan Wu

Orals Evaluator

Toby Bell, Matthew Hunter

Doctoral Dissertation Co-Advisor (AC)

Samuel Akinwande, Lauren Simitz

Master's Program Advisor

Yasmine Alonso, Emma Beharry, Agam Bhatia, Ryan Bookman, Julian Brown, . Dao, Aleksandra Fenchenko, Andres Garcia, Filip Henriksson, Tyler Ho, Noah Islam, Justin Jasper, Michelle Jin, Shreya Joshi, Manav Kant, Hiroki Kawai, Houjun Liu, Zijian Luo, Riya Narain, Sabrina Nicacio, Kwame Ocran, Vikas Patel, Helen Pruitt-Kennett, Vale Rasmussen, Allan Reuben, Natalie Shell, Daniel Simpson, Hristo Todorov, Renaldo Venegas, Ashley Vincent, Märta Vucetic, Jun Wang, Eric Xia

Doctoral (Program)

Olivia Bruvik, Francois Chaubard, Anka Reuel

Publications

PUBLICATIONS

- **Probabilistic parameter estimators and calibration metrics for pose estimation from image features** *Digital Avionics Systems Conference (DASC)*
  Valentin, R., Katz, S., Lee, J., Arief, M., Sorgenfrei, M., Walker, D., Kochenderfer, M. J.
  2024
- **Hierarchical Framework for Optimizing Wildfire Surveillance and Suppression Using Human-Autonomous Teaming** *Journal of Aerospace Information Systems*
  Al-Husseini, M., Wray, K., Kochenderfer, M.
  2024
- **BetterBench: Assessing AI benchmarks, uncovering issues, and establishing best practices** *Advances in Neural Information Processing Systems (NeurIPS)*
  Reuel, A., Hardy, A., Smith, C., Lamparth, M., Hardy, M., Kochenderfer, M. J.
  2024
- **Learning-based methods for adaptive informative path planning** *Robotics and Autonomous Systems*
  Popović, M., Ott, J., Rückin, J., Kochenderfer, M. J.
  2024; 179
- **Ambulance routing for optimizing stroke patient outcomes** *AI for Health Equity and Fairness*
  Molins, E., Alonso, Y., Kochenderfer, M. J., Heit, J. J., Pulli, B.
  Springer.2024: 19-30
- **Semantic belief behavior graph: Enabling autonomous robot inspection in unknown environments** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Ginting, M. F., Fan, D. D., Kim, S., Kochenderfer, M. J., Agha-mohammadi, A.
  2024
- **PyroRL: A reinforcement learning environment for wildfire evacuation** *Journal of Open Source Software*
  Guman, J., O'Brien, J. C., Pondoc, C., Kochenderfer, M. J.
  2024; 9 (101)
- **Efficient line-of-sight viewpoint sampling in complex environments for autonomous surface inspection** *IEEE International Symposium on Safety Security Rescue Robotics (SSRR)*
  Moon, S., Kim, S., Peltzer, O., Kochenderfer, M. J., Khattak, S.
  2024

- **An addendum to NeBula: Toward extending team CoSTAR's solution to larger scale environments** *IEEE Transactions on Field Robotics*
  Morrell, B., et al
  2024; 1: 476-526
- **Hierarchical framework for optimizing wildfire surveillanceand suppression using human-autonomous teaming** *Journal of Aerospace Information Systems*
  Al-Husseini, M., Wray, K., Kochenderfer, M. J.
  2024; 21 (10): 790-811
- **Sequentially optimized data acquisition for a geothermal reservoir** *Geothermics*
  Corso, A., Chiotoroiu, M., Clemens, T., Zechner, M., Kochenderfer, M. J.
  2024; 120
- **Artificial intelligence-centric low-enthalpy geothermal field development planning** *Energies*
  Clemens, T., Chiotoroiu, M., Corso, A., Zechner, M., Kochenderfer, M. J.
  2024; 17 (8)
- **Distributed online planning for min-max problems in networked Markov games** *IEEE Robotics and Automation Letters*
  Tzikas, A. E., Park, J., Kochenderfer, M. J., Allen, R. E.
  2024; 9 (7): 6656-6663
- **Risk-aware meta-level decision making for exploration under uncertainty** *International Conference on Control, Decision and Information Technologies (CoDIT)*
  Ott, J., Kim, S., Bouman, A., Peltzer, O., Sobue, M., Delecki, H., Kochenderfer, M. J., Burdick, J., Agha-mohammadi, A.
  2024
- **Trajectory optimization for adaptive informative path planning with multimodal sensing** *International Conference on Control, Decision and Information Technologies (CoDIT)*
  Ott, J., Balaban, E., Kochenderfer, M. J.
  2024
- **ConstrainedZero: Chance-constrained POMDP planning using learned probabilistic failure surrogates and adaptive safety constraints** *International Joint Conference on Artificial Intelligence (IJCAI)*
  Moss, R. J., Jamgochian, A., Fischer, J., Corso, A., Kochenderfer, M. J.
  2024
- **BetaZero: Belief-state planning for long-horizon POMDPs using learned approximations** *Reinforcement Learning Conference*
  Moss, R. J., Corso, A., Caers, J., Kochenderfer, M. J.
  2024
- **Interactive autonomous navigation with internal state inference and interactivity estimation** *IEEE Transactions on Robotics*
  Li, J., Isele, D., Lee, K., Park, J., Fujimura, K., Kochenderfer, M. J.
  2024; 40: 2932-2949
- **SEEK: Semantic reasoning for object goal navigation in real world inspection tasks** *Robotics: Science and Systems*
  Ginting, M. F., Kim, S., Fan, D. D., Palieri, M., Kochenderfer, M. J., Agha-mohammadi, A.
  2024
- **Satisfiability.jl: Satisfiability modulo theories in Julia** *Journal of Open Source Software*
  Soroka, E., Kochenderfer, M. J., Lall, S.
  2024; 9 (100)
- **Predicting future spatiotemporal occupancy grids with semantics for autonomous driving** *IEEE Intelligent Vehicles Symposium (IV)*
  Toyungyernsub, M., Yel, E., Li, J., Kochenderfer, M. J.
  2024
- **Rank2Tell: A multimodal driving dataset for joint importance ranking and reasoning** *Winter Conference on Applications of Computer Vision*
  Sachdeva, E., Agarwal, N., Chundi, S., Roelofs, S., Li, J., Kochenderfer, M. J., Choi, C., Dariush, B.
  2024

- **Disentangled neural relational inference for interpretable motion prediction** *IEEE Robotics and Automation Letters*
  Dax, V. M., Li, J., Sachdeva, E., Agarwal, N., Kochenderfer, M. J.
  2024; 9 (2): 1452-1459
- **Scene informer: anchor-based occlusion inference and trajectory prediction in partially observable environments** *IEEE International Conference on Robotics and Automation (ICRA)*
  Lange, B., Li, J., Kochenderfer, M. J.
  2024
- **Constrained hierarchical Monte Carlo belief-state planning** *IEEE International Conference on Robotics and Automation (ICRA)*
  Jamgochian, A., Buurmeijer, H., Wray, K., Corso, A., Kochenderfer, M. J.
  2024
- **Addressing myopic constrained POMDP planning with recursive dual ascent** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Stocco, P., Chundi, S., Jamgochian, A., Kochenderfer, M. J.
  2024
- **Bayesian safety validation for failure probability estimation of black-box systems** *Journal of Aerospace Information Systems*
  Moss, R. J., Kochenderfer, M. J., Gariel, M., Dubois, A.
  2024; 21 (7)
- **Approximate sequential optimization for informative path planning** *Robotics and Autonomous Systems*
  Ott, J., Kochenderfer, M. J., Boyd, S.
  2024; 182
- **A month in review: longitudinal dynamics between daily PTSD symptom networks, affect, and drinking behaviors in female college students** *Frontiers in Psychology*
  Balters, S., Schlichting, M., Walton, T. O., Kochenderfer, M. J., Kaysen, D.
  2024; 15
- **Optimal control of mechanical ventilators with learned respiratory dynamics** *IEEE International Symposium on Computer-Based Medical Systems (CBMS)*
  Wald, I. R., Asmar, D. M., Arief, M., Mike, J. K., Kochenderfer, M. J.
  2024
- **Global optimization of objective functions represented by ReLU networks** *Machine Learning*
  Strong, C. A., Wu, H., Zeljić, A., Julian, K. D., Katz, G., Barrett, C., Kochenderfer, M. J.
  2023; 112: 3685-3712
- **Towards sequential sensor placements on a wind farm to maximize lifetime energy and profit** *Renewable Energy*
  Yildiz, A., Mern, J., Kochenderfer, M. J., Howland, M. F.
  2023; 216
- **Robust driving policy learning with guided meta reinforcement learning** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Lee, K., Li, J., Isele, D., Park, J., Fujimura, K., Kochenderfer, M. J.
  2023
- **SAVME: Efficient safety validation for autonomous systems using meta-learning** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Schlichting, M. R., Boord, N. V., Corso, A., Kochenderfer, M. J.
  2023
- **Experience filter: Using past experiences on unseen tasks or environments** *IEEE Intelligent Vehicles Symposium (IV)*
  Yildiz, A., Yel, E., Corso, A. L., Wray, K. H., Witwicki, S. J., Kochenderfer, M. J.
  2023
- **Deep normalizing flows for state estimation** *IEEE International Conference on Information Fusion (FUSION)*
  Delecki, H., Kruse, L., Schlichting, M., Kochenderfer, M. J.

2023

- **Backward reachability analysis of neural feedback loops: {T}echniques for linear and nonlinear systems** *IEEE Open Journal of Control Systems*
  Rober, N., Katz, S. M., Sidrane, C., Yel, E., Everett, M., Kochenderfer, M. J., How, J. P.
  2023; 2: 108-124
- **Model-based validation as probabilistic inference** *Conference on Learning for Dynamics and Control (L4DC)*
  Delecki, H., Corso, A., Kochenderfer, M. J.
  2023
- **Multirobot navigation using partially observable {M}arkov decision processes with belief-based rewards** *Journal of Aerospace Information Systems*
  Tzikas, A. E., Knowles, D., Gao, G. X., Kochenderfer, M. J.
  2023; 20 (8): 437-525
- **Bayesian safety validation for black-box systems** *AIAA AVIATION*
  Moss, R. J., Kochenderfer, M. J., Gariel, M., Dubois, A.
  2023
- **Modeling human driving behavior through generative adversarial imitation learning** *IEEE Transactions on Intelligent Transportation Systems*
  Bhattacharyya, R., Wulfe, B., Phillips, D. J., Kuefler, A., Morton, J., Senanayake, R., Kochenderfer, M. J.
  2023; 24 (3): 2874-2887
- **Fast and scalable signal inference for active robotic source seeking** *IEEE International Conference on Robotics and Automation (ICRA)*
  Denniston, C. E., Peltzer, O., Ott, J., Moon, S., Kim, S., Sukhatme, G., Kochenderfer, M. J., Agha-mohammadi, A.
  2023
- **Safe and efficient navigation in extreme environments using semantic belief graphs** *IEEE International Conference on Robotics and Automation (ICRA)*
  Ginting, M. F., Kim, S., Peltzer, O., Ott, J., Jung, S., Kochenderfer, M. J., Agha-mohammadi, A.
  2023
- **Model predictive optimized path integral strategies** *IEEE International Conference on Robotics and Automation (ICRA)*
  Asmar, D., Senanayake, R., Manuel, S., Kochenderfer, M. J.
  2023
- **Sequential Bayesian optimization for adaptive informative path planning with multimodal sensing** *IEEE International Conference on Robotics and Automation (ICRA)*
  Ott, J., Balaban, E., Kochenderfer, M. J.
  2023
- **SHAIL: Safety-aware hierarchical adversarial imitation learning for autonomous driving in urban environments** *IEEE International Conference on Robotics and Automation (ICRA)*
  Jamgochian, A., Buehrle, E., Fischer, J., Kochenderfer, M. J.
  2023
- **Online planning for constrained POMDPs with continuous spaces through dual ascent** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Jamgochian, A., Corso, A., Kochenderfer, M. J.
  2023
- **Portfolio construction as linearly constrained separable optimization** *Optimization and Engineering*
  Moehle, N., Gindi, J., Boyd, S., Kochenderfer, M. J.
  2023; 24: 1667-1687
- **Conformal prediction for uncertainty-aware planning with diffusion dynamics model** *Advances in Neural Information Processing Systems (NeurIPS)*
  Sun, J., Jiang, Y., Qiu, J., Nobel, P. T., Kochenderfer, M. J., Schwager, M.
  2023

- **Generating probabilistic safety guarantees for neural network controllers** *Machine Learning*
  Katz, S. M., Julian, K. D., Strong, C. A., Kochenderfer, M. J.
  2023; 112: 2903-2931
- **SHAIL: Safety-aware hierarchical adversarial imitation learning for autonomous driving in urban environments** *IEEE International Conference on Robotics and Automation (ICRA)*
  Jamgochian, A., Buehrle, E., Fischer, J., Kochenderfer, M. J.
  2023
- **Online planning for constrained POMDPs with continuous spaces through dual ascent** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Jamgochian, A., Corso, A., Kochenderfer, M. J.
  2023
- **Portfolio construction as linearly constrained separable optimization** *Optimization and Engineering*
  Moehle, N., Gindi, J., Boyd, S., Kochenderfer, M. J.
  2023; 24: 1667-1687
- **Conformal prediction for uncertainty-aware planning with diffusion dynamics model** *Advances in Neural Information Processing Systems (NeurIPS)*
  Sun, J., Jiang, Y., Qiu, J., Nobel, P. T., Kochenderfer, M. J., Schwager, M.
  2023
- **Generating probabilistic safety guarantees for neural network controllers** *Machine Learning*
  Katz, S. M., Julian, K. D., Strong, C. A., Kochenderfer, M. J.
  2023; 112: 2903-2931
- **Algorithms for Decision Making**
  Kochenderfer, M. J., Wheeler, T. A., Wray, K. H.
  MIT Press.2022
- **Modeling human driving behavior through generative adversarial imitation learning** *IEEE Transactions on Intelligent Transportation Systems*
  Bhattacharyya, R., Wulfe, B., Phillips, D. J., Kuefler, A., Morton, J., Senanayake, R., Kochenderfer, M. J.
  2022
- **Personalizing exoskeleton assistance while walking in the real world** *Nature*
  Slade, P., Kochenderfer, M. J., Delp, S. L., Collins, S. H.
  2022; 610 (7931): 277-282
- **Interpretable self-aware neural networks for robust trajectory prediction** *Conference on Robot Learning (CoRL)*
  Itkina, M., Kochenderfer, M. J.
  2022
- **Interaction modeling with multiplex attention** *Advances in Neural Information Processing Systems (NeurIPS)*
  Sun, F., Kauvar, I., Zhang, R., Li, J., Kochenderfer, M. J., Wu, J., Haber, N.
  2022
- **Collaborative decision making using action suggestions** *Advances in Neural Information Processing Systems (NeurIPS)*
  Asmar, D., Kochenderfer, M. J.
  2022
- **Risk-driven design of perception systems** *Advances in Neural Information Processing Systems (NeurIPS)*
  Corso, A., Katz, S. M., Innes, C. A., Du, X., Ramamoorthy, S., Kochenderfer, M. J.
  2022
- **Collision risk and operational impact of speed change advisories as aircraft collision avoidance maneuvers** *AIAA AVIATION Forum*
  Katz, S. M., Alvarez, L. E., Owen, M., Wu, S., Brittain, M. W., Das, A., Kochenderfer, M. J.
  2022
- **Prioritizing emergency evacuations under compounding levels of uncertainty** *IEEE Global Humanitarian Technology Conference (GHTC)*

Einstein, L. J., Moss, R. J., Kochenderfer, M. J.
2022

- **Uncertainty-aware online merge planning with learned driver behavior** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Kruse, L., Yel, E., Senanayake, R., Kochenderfer, M. J.
  2022
- **Verification of image-based neural network controllers using generative models** *Journal of Aerospace Information Systems*
  Katz, S. M., Corso, A. L., Strong, C. A., Kochenderfer, M. J.
  2022; 19 (9): 574-584
- **Multi-objective policy gradients with topological constraints** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Wray, K., Tiomkin, S., Kochenderfer, M. J., Abbeel, P.
  2022
- **FIG-OP: Exploring large-scale unknown environments on a fixed time budget** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Peltzer, O., Bouman, A., Kim, S., Senanayake, R., Ott, J., Delecki, H., Sobue, M., Kochenderfer, M. J., Schwager, M., Burdick, J., Agha-mohammadi, A.
  2022
- **Dynamics-aware spatiotemporal occupancy prediction in urban environments** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Toyungyernsub, M., Yel, E., Li, J., Kochenderfer, M. J.
  2022
- **How do we fail? Stress testing perception in autonomous vehicles,** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Delecki, H., Itkina, M., Lange, B., Senanayake, R., Kochenderfer, M. J.
  2022
- **Adaptive coverage path planning for efficient exploration of unknown environments** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Bouman, A., Ott, J., Kim, S., Chen, K., Kochenderfer, M. J., Lopez, B., Agha-mohammadi, A., Burdick, J.
  2022
- **A sequential decision-making framework with uncertainty quantification for groundwater management** *Advances in Water Resources*
  Wang, Y., Zechner, M., Mern, J. M., Kochenderfer, M. J., Caers, J. K.
  2022; 166
- **Hierarchical planning for dynamic resource allocation in smart and connected communities** *ACM Transactions on Cyber-Physical Systems*
  Pettet, G., Mukhopadhyay, A., Kochenderfer, M. J., Dubey, A.
  2022
- **Optimal pointing sequences in spacecraft formation flying usingonline planning with resource constraints** *Conference on Learning for Dynamics and Control (L4DC)*
  Low, S. Y., Kochenderfer, M. J.
  2022
- **Scalable online planning for multi-agent MDPs,** *Journal of Artificial Intelligence Research*
  Choudhury, S., Gupta, J. K., Morales, P., Kochenderfer, M. J.
  2022; 73: 821-846
- **Learning emergent discrete message communication for cooperative reinforcement learning** *IEEE International Conference on Robotics and Automation (ICRA)*
  Li, S., Zhou, Y., Allen, R., Kochenderfer, M. J.
  2022
- **Infrastructure-enabled autonomy: An attention mechanism for occlusion handling** *IEEE International Conference on Robotics and Automation (ICRA)*

Dax, V. M., Kochenderfer, M. J., Senanayake, R., Ibrahim, U.
2022

- **Multi-agent variational occlusion inference using people as sensors** *IEEE International Conference on Robotics and Automation (ICRA)*
Itkina, M., Mun, Y., Driggs-Campbell, K., Kochenderfer, M. J.
2022

- **A review of incident prediction, resource allocation, and dispatch models for emergency management** *Accident Analysis and Prevention*
Mukhopadhyay, A., Pettet, G., Vazirizade, S. M., Lu, D., Jaimes, A., El Said, S., Baroud, H., Vorobeychik, Y., Kochenderfer, M. J., Dubey, A.
2022; 165

- **Coordinated multi-agent path finding for drones and trucks over road networks** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
Choudhury, S., Solovey, K., Kochenderfer, M. J., Pavone, M.
2022

- **Agent-time attention for sparse rewards multi-agent reinforcement learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
She, J., Gupta, J. K., Kochenderfer, M. J.
2022

- **Recursive reasoning graph for multi-agent reinforcement learning** *AAAI Conference on Artificial Intelligence (AAAI)*
Ma, X., Isele, D., Gupta, J. K., Fujimura, K., Kochenderfer, M. J.
2022

- **OVERT: An algorithm for safety verification of neural network control policies for nonlinear systems** *Journal of Machine Learning Research*
Sidrane, C., Maleki, A., Irfan, A., Kochenderfer, M. J.
2022; 23 (117): 1-45

- **ZoPE: A fast optimizer for ReLU networks with low-dimensional inputs** *NASA Formal Methods Symposium (NFM)*
Strong, C. A., Katz, S. M., Corso, A. L., Kochenderfer, M. J.
2022

- **Portfolio construction as linearly constrained separable optimization** *Optimization and Engineering*
Moehle, N., Gindi, J., Boyd, S., Kochenderfer, M. J.
2022

- **Improving automated driving through POMDP planning with human internal states** *IEEE Transactions on Intelligent Transportation Systems*
Sunberg, Z. N., Kochenderfer, M. J.
2022; 23 (11): 20073-20083

- **Algorithms for verifying deep neural networks** *Foundations and Trends in Optimization*
Liu, C., Arnon, T., Lazarus, C., Strong, C., Barrett, C., Kochenderfer, M. J.
2021; 4 (3-4): 244--404

- **Efficient large-scale multi-drone delivery using transit networks** *Journal of Artificial Intelligence Research*
Choudhury, S., Solovey, K., Kochenderfer, M. J., Pavone, M.
2021; 70: 757-788

- **Parameter-conditioned sequential generative modeling of fluid flows** *AIAA Journal*
Morton, J., Witherden, F. D., Kochenderfer, M. J.
2021; 59 (3): 825-841

- **Reachability analysis for neural network aircraft collision avoidance systems** *Journal of Guidance, Control, and Dynamics*
Julian, K. D., Kochenderfer, M. J.
2021; 44 (6): 1132-1142

- **Deep implicit coordination graphs for multi-agent reinforcement learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
Li, S., Gupta, J. K., Morales, P., Allen, R., Kochenderfer, M. J.
2021

- **Scalable anytime planning for multi-agent MDPs** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Choudhury, S., Gupta, J., Morales, P., Kochenderfer, M. J.
  2021
- **Hierarchical planning for resource allocation in emergency response systems** *ACM/IEEE International Conference on Cyber-Physical Systems (ICCPS)*
  Pettet, G., Mukhopadhyay, A., Kochenderfer, M. J., Dubey, A.
  2021
- **Double-prong ConvLSTM for spatiotemporal occupancy prediction in dynamic environments** *IEEE International Conference on Robotics and Automation (ICRA)*
  Toyungyernsub, M., Itkina, M., Senanayake, R., Kochenderfer, M. J.
  2021
- **Transfer learning for efficient iterative safety validation** *AAAI Conference on Artificial Intelligence (AAAI)*
  Corso, A., Kochenderfer, M. J., et al
  2021
- **Improved POMDP tree search planning with prioritized action branching** *AAAI Conference on Artificial Intelligence (AAAI)*
  Mern, J., Yildiz, A., Bush, L., Mukerji, T., Kochenderfer, M. J.
  2021
- **Bayesian optimized Monte Carlo planning** *AAAI Conference on Artificial Intelligence (AAAI)*
  Mern, J., Yildiz, A., Sunberg, Z., Mukerji, T., Kochenderfer, M. J.
  2021
- **Obstacle avoidance using a monocular camera** *AIAA Science and Technology Forum (SciTech)*
  Hatch, K., Mern, J., Kochenderfer, M. J.
  2021
- **Out-of-distribution detection for automotive perception** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Nitsch, J., Itkina, M., Senanayake, R., Nieto, J., Schmidt, M., Siegwart, R., Kochenderfer, M. J.
  2021
- **A survey of algorithms for black-box safety validation of cyber-physical systems** *Journal of Artificial Intelligence Research*
  Corso, A., Moss, R. J., Koren, M., Lee, R., Kochenderfer, M. J.
  2021; 72: 377–428
- **Tax-aware portfolio construction via convex optimization** *Journal of Optimization Theory and Applications*
  Moehle, N., Kochenderfer, M. J., Boyd, S., Ang, A.
  2021; 189: 364-383
- **Reinforcement learning for autonomous driving with latent state inference and spatial-temporal relationships** *IEEE International Conference on Robotics and Automation (ICRA)*
  Ma, X., Li, J., Kochenderfer, M. J., Isele, D., Fujimura, K.
  2021
- **A maximum independent set method for scheduling earth observing satellite constellations** *Journal of Spacecraft and Rockets*
  Eddy, D., Kochenderfer, M. J.
  2021; 58 (5): 1416-1429
- **Efficient large-scale multi-drone delivery using transit networks** *Journal of Artificial Intelligence Research*
  Choudhury, S., Solovey, K., Kochenderfer, M. J., Pavone, M.
  2021; 70: 757-788
- **Parameter-conditioned sequential generative modeling of fluid flows** *AIAA Journal*
  Morton, J., Witherden, F. D., Kochenderfer, M. J.
  2021; 59 (3): 825-841
- **Reachability analysis for neural network aircraft collision avoidance systems** *Journal of Guidance, Control, and Dynamics*

Julian, K. D., Kochenderfer, M. J.
2021; 44 (6): 1132-1142

- **Deep implicit coordination graphs for multi-agent reinforcement learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Li, S., Gupta, J. K., Morales, P., Allen, R., Kochenderfer, M. J.
  2021
- **Scalable anytime planning for multi-agent MDPs** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Choudhury, S., Gupta, J., Morales, P., Kochenderfer, M. J.
  2021
- **Hierarchical planning for resource allocation in emergency response systems** *ACM/IEEE International Conference on Cyber-Physical Systems (ICCPS)*
  Pettet, G., Mukhopadhyay, A., Kochenderfer, M. J., Dubey, A.
  2021
- **Double-prong ConvLSTM for spatiotemporal occupancy prediction in dynamic environments** *IEEE International Conference on Robotics and Automation (ICRA)*
  Toyungyernsub, M., Itkina, M., Senanayake, R., Kochenderfer, M. J.
  2021
- **Transfer learning for efficient iterative safety validation** *AAAI Conference on Artificial Intelligence (AAAI)*
  Corso, A., Kochenderfer, M. J., et al
  2021
- **Improved POMDP tree search planning with prioritized action branching** *AAAI Conference on Artificial Intelligence (AAAI)*
  Mern, J., Yildiz, A., Bush, L., Mukerji, T., Kochenderfer, M. J.
  2021
- **Bayesian optimized Monte Carlo planning** *AAAI Conference on Artificial Intelligence (AAAI)*
  Mern, J., Yildiz, A., Sunberg, Z., Mukerji, T., Kochenderfer, M. J.
  2021
- **Obstacle avoidance using a monocular camera** *AIAA Science and Technology Forum (SciTech)*
  Hatch, K., Mern, J., Kochenderfer, M. J.
  2021
- **Out-of-distribution detection for automotive perception** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Nitsch, J., Itkina, M., Senanayake, R., Nieto, J., Schmidt, M., Siegwart, R., Kochenderfer, M. J.
  2021
- **A survey of algorithms for black-box safety validation of cyber-physical systems** *Journal of Artificial Intelligence Research*
  Corso, A., Moss, R. J., Koren, M., Lee, R., Kochenderfer, M. J.
  2021; 72: 377–428
- **Normalizing flow model for policy representation in continuous action multi-agent systems** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Ma, X., Gupta, J. K., Kochenderfer, M. J.
  2020
- **Multi-agent adversarial inverse reinforcement learning with latent variables** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Gruver, N., Song, J., Kochenderfer, M. J., Ermon, S.
  2020
- **On algorithmic decision procedures in emergency response systems in smart and connected communities** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Pettet, G., Mukhopadhyay, A., Kochenderfer, M. J., Vorobeychik, Y., Dubey, A.
  2020

- **Model primitives for hierarchical lifelong reinforcement learning** *Autonomous Agents and Multi-Agent Systems*
  Wu, B., Gupta, J. K., Kochenderfer, M. J.
  2020; 34
- **Adaptive informative path planning with multimodal sensing** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Gruver, N., Choudhury, S., Kochenderfer, M. J.
  2020
- **Online parameter estimation for human driver behavior prediction** *American Control Conference (ACC)*
  Bhattacharyya, R. P., Senanayake, R., Brown, K., Kochenderfer, M. J.
  2020
- **Exchangeable input representations for reinforcement learning** *American Control Conference (ACC)*
  Mern, J., Sadigh, D., Kochenderfer, M. J.
  2020
- **Combining planning and deep reinforcement learning in tactical decision making for autonomous driving** *IEEE Transactions on Intelligent Vehicles*
  Hoel, C., Driggs-Campbell, K., Wolff, K., Laine, L., Kochenderfer, M. J.
  2020; 5 (2): 294-305
- **Point-based methods for model checking in partially observable Markov decision processes** *AAAI Conference on Artificial Intelligence (AAAI)*
  Bouton, M., Tumova, J., Kochenderfer, M. J.
  2020
- **Markov decision processes for multi-objective satellite task planning** *IEEE Aerospace Conference*
  Eddy, D., Kochenderfer, M. J.
  2020
- **Adaptive stress testing: finding likely failure events with reinforcement learning** *Journal of Artificial Intelligence Research*
  Lee, R., Mengshoel, O. J., Saksena, A., Gardner, R. W., Genin, D., Silbermann, J., Owen, M., Kochenderfer, M. J.
  2020; 69: 1165-1201
- **Robust spatial-temporal incident prediction** *Conference on Uncertainty in Artificial Intelligence (UAI)*
  Mukhopadhyay, A., Wang, K., Perrault, A., Kochenderfer, M. J., Tambe, M., Vorobeychik, Y.
  2020
- **Normalizing flow policies for multi-agent systems** *Conference on Decision and Game Theory for Security (GameSec)*
  Ma, X., Gupta, J. K., Kochenderfer, M. J.
  2020
- **Provably efficient reward-agnostic navigation with linear value iteration** *Advances in Neural Information Processing Systems (NeurIPS)*
  Zanette, A., Lazaric, A., Kochenderfer, M. J., Brunskill, E.
  2020
- **Handling missing data with graph representation learning** *Advances in Neural Information Processing Systems (NeurIPS)*
  You, J., Ma, X., Ding, D., Kochenderfer, M. J., Leskovec, J.
  2020
- **Evidential sparsification of multimodal latent spaces in conditional variational autoencoders** *Advances in Neural Information Processing Systems (NeurIPS)*
  Itkina, M., Ivanovic, B., Senanayake, R., Kochenderfer, M. J., Pavone, M.
  2020
- **Learning near optimal policies with low inherent Bellman error** *International Conference on Machine Learning (ICML)*
  Zanette, A., Lazaric, A., Kochenderfer, M. J., Brunskill, E.
  2020
- **Scalable identification of partially observed systems with certainty-equivalent EM** *International Conference on Machine Learning (ICML)*
  Menda, K., de Becdelievre, J., Gupta, J. K., Kroo, I., Kochenderfer, M. J., Manchester, Z.

2020

- **Efficient large-scale multi-drone delivery using transit networks** *IEEE International Conference on Robotics and Automation (ICRA)*
  Choudhury, S., Solovey, K., Kochenderfer, M. J., Pavone, M.
  2020
- **Adaptive stress testing without domain heuristics using go-explore**
  Koren, M., Kochenderfer, M. J.
  2020
- **Interpretable safety validation for autonomous vehicles** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Corso, A., Kochenderfer, M. J.
  2020
- **Scalable autonomous vehicle safety validation through dynamic programming and scene decomposition** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Corso, A., Lee, R., Kochenderfer, M. J.
  2020
- **Reinforcement learning with iterative reasoning for merging in dense traffic** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Bouton, M., Nakhaei, A., Isele, D., Fujimura, K., Kochenderfer, M. J.
  2020
- **Validation of image-based neural network controllers through adaptive stress testing**
  Julian, K. D., Lee, R., Kochenderfer, M. J.
  2020
- **Directional primitives for uncertainty-aware motion estimation in urban environments** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Senanayake, R., Toyungyernsub, M., Wang, M., Kochenderfer, M. J., Schwager, M.
  2020
- **Dynamic multi-robot task allocation under uncertainty and temporal constraints** *Robotics: Science and Systems*
  Choudhury, S., Gupta, J. K., Kochenderfer, M. J., Sadigh, D., Bohg, J.
  2020
- **Active preference-based Gaussian process regression for reward learning** *Robotics: Science and Systems*
  Biyik, E., Huynh, N., Kochenderfer, M. J., Sadigh, D.
  2020
- **Structured mechanical models for robot learning and control** *Conference on Learning for Dynamics and Control*
  Gupta, J. K., Menda, K., Manchester, Z., Kochenderfer, M. J.
  2020
- **Image-based guidance of autonomous aircraft for wildfire surveillance and predictions** *Digital Avionics Systems Conference (DASC)*
  Julian, K. D., Kochenderfer, M. J.
  2020
- **Runtime safety assurance using reinforcement learning** *Digital Avionics Systems Conference (DASC)*
  Lazarus, C., Lopez, J. G., Kochenderfer, M. J.
  2020
- **Adaptive stress testing of trajectory predictions in flight management systems** *Digital Avionics Systems Conference (DASC)*
  Moss, R. J., Lee, R., Visser, N., Kochenderfer, M. J.
  2020
- **Towards verification of neural networks for small unmanned aircraft collision avoidance** *Digital Avionics Systems Conference (DASC)*
  Irfan, A., Julian, K. D., Wu, H., Barrett, C., Kochenderfer, M. J., Meng, B., Lopez, J.
  2020

- **Analysis of fleet management and infrastructure constraints in on-demand urban air mobility operations** *AIAA AVIATION*
  Li, S., Egorov, M., Kochenderfer, M. J.
  2020
- **Reinforcement learning for adaptive illumination with x-rays** *IEEE International Conference on Robotics and Automation (ICRA)*
  Betterton, J., Kochenderfer, M. J., Ratner, D., Webb, S.
  2020
- **Reinforcement learning for adaptive illumination with x-rays** *IEEE International Conference on Robotics and Automation (ICRA)*
  Betterton, J., Kochenderfer, M. J., Ratner, D., Webb, S.
  2020
- **Algorithms for Optimization**
  Kochenderfer, M. J., Wheeler, T. A.
  MIT Press.2019
- **Optimizing collision avoidance in dense airspace using deep reinforcement learning** *Air Traffic Management Research and Development Seminar*
  Li, S., Egorov, M., Kochenderfer, M. J.
  2019
- **Estimation and control using sampling-based Bayesian reinforcement learning** *IET Cyber-Physical Systems: Theory & Applications*
  Slade, P., Sunberg, Z. N., Kochenderfer, M. J.
  2019; 5 (1): 127-135
- **Predicting subjective sleep quality using recurrent neural networks** *IEEE Signal Processing in Medicine and Biology Symposium*
  Boussard, J., Kochenderfer, M. J., Zeitzer, J. M.
  2019
- **Almost horizon-free structure-aware best policy identification with a generative model** *Advances in Neural Information Processing Systems (NeurIPS)*
  Zanette, A., Kochenderfer, M. J., Brunskill, E.
  2019
- **Limiting extrapolation in linear approximate value iteration** *Advances in Neural Information Processing Systems (NeurIPS)*
  Zanette, A., Lazaric, A., Kochenderfer, M. J., Brunskill, E.
  2019
- **Stochastic model predictive control for scheduling charging of electric vehicle fleets with market power** *IEEE International Conference on Connected Vehicles and Expo (ICCVE)*
  Jamgochian, A. L., Kochenderfer, M. J.
  2019
- **Efficient autonomy validation in simulation with adaptive stress testing** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Koren, M., Kochenderfer, M. J.
  2019
- **Dynamic environment prediction in urban scenes using recurrent representation learning** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Itkina, M., Driggs-Campbell, K., Kochenderfer, M. J.
  2019
- **Adaptive stress testing with reward augmentation for autonomous vehicle validation** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Corso, A., Du, P., Driggs-Campbell, K., Kochenderfer, M. J.
  2019
- **Cooperation-aware reinforcement learning for merging in dense traffic** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Bouton, M., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.

2019

- **Towards closing the loop on human values** *IEEE Transactions on Intelligent Vehicles*
  Thornton, S. M., Limonchik, B., Lewis, F. E., Kochenderfer, M. J., Gerdes, J. C.
  2019; 4 (3): 437-446
- **The Marabou framework for verication and analysis of deep neural networks** *International Conference on Computer-Aided Verification (CAV)*
  Katz, G., Huang, D. A., Ibeling, D., Julian, K., Lazarus, C., Lim, R., Shah, P., Thakoor, S., Wu, H., Zeljic, A., Dill, D. L., Kochenderfer, M. J., Barrett, et al
  2019
- **Monte Carlo tree search for policy optimization** *International Joint Conference on Artificial Intelligence (IJCAI)*
  Ma, X., Driggs-Campbell, K., Zhang, Z., Kochenderfer, M. J.
  2019
- **Deep variational Koopman models: Inferring Koopman observations for uncertainty-aware dynamics modeling and control** *International Joint Conference on Artificial Intelligence (IJCAI)*
  Morton, J., Witherden, F. D., Kochenderfer, M. J.
  2019
- **Unifying system health management and automated decision making** *Journal of Artificial Intelligence Research*
  Balaban, E., Johnson, S. B., Kochenderfer, M. J.
  2019; 65: 487-518
- **Decomposition methods with deep corrections for reinforcement learning** *Autonomous Agents and Multi-Agent Systems*
  Bouton, M., Julian, K. D., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2019; 33 (3): 330-352
- **Safe reinforcement learning with scene decomposition for navigating complex urban environments** *IEEE Intelligent Vehicles Symposium (IV)*
  Bouton, M., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2019
- **Pedestrian collision avoidance system for scenarios with occlusions** *IEEE Intelligent Vehicles Symposium (IV)*
  Schratter, M., Bouton, M., Kochenderfer, M. J., Watzenig, D.
  2019
- **Dynamic real-time multimodal routing with hierarchical hybrid planning** *IEEE Intelligent Vehicles Symposium (IV)*
  Choudhury, S., Kochenderfer, M. J.
  2019
- **Critical factor graph situation clusters for accelerated automotive safety validation** *IEEE Intelligent Vehicles Symposium (IV)*
  Wheeler, T. A., Kochenderfer, M. J.
  2019
- **Learning an urban air mobility encounter model from expert preferences** *Digital Avionics Systems Conference (DASC)*
  Katz, S. M., LeBihan, A., Kochenderfer, M. J.
  2019
- **Optimal aircraft metering during space launches** *Digital Avionics Systems Conference (DASC)*
  Tompa, R. E., Kochenderfer, M. J.
  2019
- **Learning terminal airspace traffic models from flight tracks and procedures** *Digital Avionics Systems Conference (DASC)*
  Jung, S., Kochenderfer, M. J.
  2019
- **Guaranteeing safety for neural network-based aircraft collision avoidance systems** *Digital Avionics Systems Conference (DASC)*
  Julian, K. D., Kochenderfer, M. J.
  2019
- **Efficient aircraft rerouting during commercial space launches** *New Space*

Tompa, R. E., Kochenderfer, M. J.
2019; 7 (1): 12-18

- **Distributed wildfire surveillance with autonomous aircraft using deep reinforcement learning** *Journal of Guidance, Control, and Dynamics*
  Julian, K. D., Kochenderfer, M. J.
  2019; 42 (8): 1768-1778
- **Adaptive stress testing of safety-critical systems** *Safe, Autonomous and Intelligent Vehicles*
  Lee, R., Mengshoel, O. J., Kochenderfer, M. J.
  edited by Yu, H., Li, X., Murray, R., Ramesh, S., Tomlin, C. J.
  Springer.2019
- **Object exchangability in reinforcement learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Mern, J., Sadigh, D., Kochenderfer, M. J.
  2019
- **Model primitive hierarchical lifelong reinforcement learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Wu, B., Gupta, J. K., Kochenderfer, M. J.
  2019
- **Hunting drones with other drones: Tracking a moving radio target** *IEEE International Conference on Robotics and Automation (ICRA)*
  Dressel, L., Kochenderfer, M. J.
  2019
- **Simulating emergent properties of human driving behavior using multi-agent reward augmented imitation learning** *IEEE International Conference on Robotics and Automation (ICRA)*
  Bhattacharyya, R., Phillips, D. J., Liu, C., Gupta, J. K., Driggs-Campbell, K. R., Kochenderfer, M. J.
  2019
- **HG-DAgger: interactive imitation learning with human experts** *IEEE International Conference on Robotics and Automation (ICRA)*
  Kelly, M., Sidrane, C. R., Driggs-Campbell, K. R., Kochenderfer, M. J.
  2019
- **Rapid energy expenditure estimation for assisted and inclined loaded walking** *Journal of NeuroEngineering and Rehabilitation*
  Slade, P., Troutman, R., Kochenderfer, M. J., Collins, S. H., Delp, S. L.
  2019; 16 (67): 1-10
- **Visual depth mapping from monocular images using recurrent convolutional neural networks** *AIAA Science and Technology Forum (SciTech)*
  Mern, J., Julian, K. D., Tompa, R. E., Kochenderfer, M. J.
  2019
- **EnsembleDAgger: a Bayesian approach to safe imitation learning** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Menda, K., Driggs-Campbell, K. R., Kochenderfer, M. J.
  2019
- **Deep reinforcement learning for event-driven multi-agent decision processes** *IEEE Transactions on Intelligent Transportation Systems*
  Menda, K., Chen, Y., Grana, J., Bono, J. W., Tracey, B. D., Kochenderfer, M. J., Wolpert, D. H.
  2019; 20 (4): 1259-1268
- **Adaptive stress testing of trajectory planning systems** *AIAA Science and Technology Forum (SciTech)*
  Lee, R., Mengshoel, O. J., Agogino, A., Giannakoupoulou, D., Kochenderfer, M. J.
  2019
- **Deep neural network compression for aircraft collision avoidance systems** *Journal of Guidance, Control, and Dynamics*
  Julian, K. D., Kochenderfer, M. J., Owen, M. P.
  2019; 42 (3): 598-608
- **Tutorial on the generation of ergodic trajectories with projection-based gradient descent** *IET Cyber-Physical Systems: Theory and Applications*
  Dressel, L., Kochenderfer, M. J.

2019; 4 (2): 89-100

- **Recovering missing CFD data for high-order discretizations using deep neural networks and dynamics learning** *Journal of Computational Physics*
  Carlberg, K. T., Jameson, A., Kochenderfer, M. J., Morton, J., Peng, L., Witherden, F. D.
  2019; 395: 105-124
- **Learning probabilistic trajectory models of aircraft in terminal airspace from position data** *IEEE Transactions on Intelligent Transportation Systems*
  Barratt, S. T., Kochenderfer, M. J., Boyd, S. P.
  2019; 20 (9): 3536-3545
- **People as sensors: Imputing maps from human actions** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Afolabi, O., Driggs-Campbell, K. R., Dong, R., Kochenderfer, M. J., Sastry, S.
  2018
- **Scalable decision making with sensor occlusions for autonomous driving** *IEEE International Conference on Robotics and Automation (ICRA)*
  Bouton, M., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2018
- **Utility decomposition with deep corrections for scalable planning under uncertainty** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Bouton, M., Julian, K. D., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2018
- **Horizontal maneuver coordination for aircraft collision-avoidance systems** *Journal of Aerospace Information Systems*
  Tompa, R. E., Wulfe, B., Kochenderfer, M. J.
  2018; 15 (2): 92-106
- **Multi-agent reinforcement learning for multi-object tracking** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Rosello, P., Kochenderfer, M. J.
  2018
- **Toward scalable verification for safety-critical deep networks** *SysML*
  Kuper, L., Katz, G., Gottshlich, J., Julian, K. D., Barrett, C., Kochenderfer, M. J.
  2018
- **Multi-agent imitation learning for driving simulation** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Bhattacharyya, R., Phillips, D. J., Wulfe, B., Morton, J., Kuefler, A., Kochenderfer, M. J.
  2018
- **Online algorithms for POMDPs with continuous state, action, and observation spaces** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Sunberg, Z. N., Kochenderfer, M. J.
  2018
- **Exploiting hierarchy for scalable decision making in autonomous driving** *IEEE Intelligent Vehicles Symposium (IV)*
  Sonu, E., Sunberg, Z. N., Kochenderfer, M. J.
  2018
- **Closed-loop planning for disaster evacuation with stochastic arrivals** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Sidrane, C. R., Kochenderfer, M. J.
  2018
- **Amortized inference regularization** *Advances in Neural Information Processing Systems (NeurIPS)*
  Shu, R., Bui, H. H., Zhao, S., Kochenderfer, M. J., Ermon, S.
  2018
- **Deep dynamical modeling and control of unsteady fluid flows** *Advances in Neural Information Processing Systems (NeurIPS)*
  Morton, J., Witherden, F. D., Jameson, A., Kochenderfer, M. J.

2018

- **Closed-loop policies for operational tests of safety-critical systems** *IEEE Transactions on Intelligent Transportation Systems*
  Morton, J., Wheeler, T. A., Kochenderfer, M. J.
  2018; 3 (3): 317-328
- **Improved robustness, safety, and efficiency with adversarial reinforcement learning** *IEEE Intelligent Vehicles Symposium (IV)*
  Ma, X., Driggs-Campbell, K. R., Kochenderfer, M. J.
  2018
- **Analytically modeling unmanaged intersections with microscopic vehicle interactions** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Liu, C., Kochenderfer, M. J.
  2018
- **Differential adaptive stress testing of airborne collision avoidance systems** *AIAA Modeling and Simulation Conference*
  Lee, R., Mengshoel, O. J., Saksena, A., Gardner, R., Genin, D., Brush, J. S., Kochenderfer, M. J.
  2018
- **Interpretable categorization of heterogeneous time series data** *SIAM International Conference on Data Mining*
  Lee, R., Kochenderfer, M. J., Mengshoel, O. J., Silbermann, J.
  2018
- **Burn-in demonstrations for multi-modal imitation learning** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Kuefler, A., Kochenderfer, M. J.
  2018
- **Adaptive stress testing for autonomous vehicles** *IEEE Intelligent Vehicles Symposium (IV)*
  Koren, M., Alsaif, S., Lee, R., Kochenderfer, M. J.
  2018
- **Autonomous distributed wildfire surveillance using deep reinforcement learning** *AIAA Guidance, Navigation, and Control Conference (GNC)*
  Julian, K. D., Kochenderfer, M. J.
  2018
- **Pseudo-bearing measurements for improved localization of radio sources with multirotor UAVs** *IEEE International Conference on Robotics and Automation (ICRA)*
  Dressel, L., Kochenderfer, M. J.
  2018
- **Using neural networks to generate information maps for mobile sensors** *IEEE Conference on Decision and Control (CDC)*
  Dressel, L., Kochenderfer, M. J.
  2018
- **On the optimality of ergodic trajectories for information gathering tasks** *American Control Conference (ACC)*
  Dressel, L., Kochenderfer, M. J.
  2018
- **Efficient and low-cost localization of radio signals with a multirotor UAV** *AIAA Guidance, Navigation, and Control Conference (GNC)*
  Dressel, L., Kochenderfer, M. J.
  2018
- **Improving offline value-function approximations for POMDPs by reducing discount factors** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Chen, Y., Kochenderfer, M. J., Spaan, M. T.
  2018
- **Scalable decision making with sensor occlusions for autonomous driving** *IEEE International Conference on Robotics and Automation (ICRA)*
  Bouton, M., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2018

- **Utility decomposition with deep corrections for scalable planning under uncertainty** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Bouton, M., Julian, K. D., Nakhaei, A., Fujimura, K., Kochenderfer, M. J.
  2018
- **Horizontal maneuver coordination for aircraft collision-avoidance systems** *Journal of Aerospace Information Systems*
  Tompa, R. E., Wulfe, B., Kochenderfer, M. J.
  2018; 15 (2): 92-106
- **Multi-agent reinforcement learning for multi-object tracking** *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*
  Rosello, P., Kochenderfer, M. J.
  2018
- **Toward scalable verification for safety-critical deep networks** *SysML*
  Kuper, L., Katz, G., Gottshlich, J., Julian, K. D., Barrett, C., Kochenderfer, M. J.
  2018
- **Multi-agent imitation learning for driving simulation** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Bhattacharyya, R., Phillips, D. J., Wulfe, B., Morton, J., Kuefler, A., Kochenderfer, M. J.
  2018
- **A comparison of Monte Carlo tree search and rolling horizon optimization for large-scale dynamic resource allocation problems** *European Journal of Operational Research*
  Bertsimas, D., Griffith, J., Gupta, V., Kochenderfer, M. J., Misic, V. V.
  2017; 263 (2): 664-678
- **Weighted double Q-learning** *International Joint Conference on Artificial Intelligence (IJCAI)*
  Zhang, Z., Pan, Z., Kochenderfer, M. J.
  2017
- **Deep stochastic radar models** *IEEE Intelligent Vehicles Symposium (IV)*
  Wheeler, T. A., Holder, M. F., Winner, H., Kochenderfer, M. J.
  2017
- **The value of inferring the internal state of traffic participants for autonomous freeway driving** *American Control Conference (ACC)*
  Sunberg, Z. N., Ho, C., Kochenderfer, M. J.
  2017
- **Simultaneous active parameter estimation and control using sampling-based Bayesian reinforcement learning** *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
  Slade, P., Culbertson, P., Sunberg, Z. N., Kochenderfer, M. J.
  2017
- **Generalizable intention prediction of human drivers at intersections** *IEEE Intelligent Vehicles Symposium (IV)*
  Phillips, D. J., Wheeler, T. A., Kochenderfer, M. J.
  2017
- **Markov decision process-based distributed conflict resolution for drone air traffic management** *Journal of Guidance, Control, and Dynamics*
  Ong, H., Kochenderfer, M. J.
  2017; 40 (1): 69-80
- **Analysis of recurrent neural networks for probabilistic modeling of driver behavior** *IEEE Transactions on Intelligent Transportation Systems*
  Morton, J., Wheeler, T. A., Kochenderfer, M. J.
  2017; 18 (5): 1289-1298
- **Simultaneous policy learning and latent state inference for imitating driver behavior** *IEEE International Conference on Intelligent Transportation Systems (ITSC)*
  Morton, J., Kochenderfer, M. J.
  2017

- **Learning traffic patterns at small airports from flight tracks** *IEEE Transactions on Intelligent Transportation Systems*
  Mahboubi, Z., Kochenderfer, M. J.
  2017; 18 (4): 917-926
- **Layer-wise synapse optimization for implementing neural networks on general neuromorphic architectures** *IEEE Symposium Series on Computational Intelligence*
  Mern, J., Gupta, J. K., Kochenderfer, M. J.
  2017
- **Imitating driver behavior with generative adversarial networks** *IEEE Intelligent Vehicles Symposium (IV)*
  Kuefler, A., Morton, J., Wheeler, T. A., Kochenderfer, M. J.
  2017
- **Geometric concept acquisition in a dueling deep Q-network** *Annual Meeting of the Cognitive Science Society*
  Kuefler, A., Kochenderfer, M. J., McClelland, J. L.
  2017
- **Burn-in demonstrations for multi-modal imitation learning** *Conference on Robotic Learning*
  Kuefler, A., Kochenderfer, M. J.
  2017
- **Heuristics for planning with rare catastrophic events** *Winter Simulation Conference*
  Kim, Y., Gur, Y., Kochenderfer, M. J.
  2017
- **Reluplex: An efficient SMT solver for verifying deep neural networks** *International Conference on Computer-Aided Verification*
  Katz, G., Barrett, C., Dill, D. L., Julian, K. D., Kochenderfer, M. J.
  2017
- **Neural network guidance for UAVs** *AIAA Guidance, Navigation, and Control Conference (GNC)*
  Julian, K. D., Kochenderfer, M. J.
  2017
- **Belief State Planning for Autonomously Navigating Urban Intersections** *IEEE Intelligent Vehicles Symposium (IV)*
  Bouton, M., Cosgun, A., Kochenderfer, M. J.
  2017
- **Automated Dynamic Resource Allocation for Wildfire Suppression** *Lincoln Laboratory Journal*
  Griffith, J., Kochenderfer, M. J., Moss, R. J., Misic, V. V., Gupta, V., Bertsimas, D.
  2017; 22 (2): 38-59
- **POMDPs.jl: A Framework for Sequential Decision Making under Uncertainty** *Journal of Machine Learning Research*
  Egorov, M., Sunberg, Z. N., Balaban, E., Wheeler, T. A., Gupta, J. K., Kochenderfer, M. J.
  2017; 18 (26): 1-5
- **Efficient Decision-Theoretic Target Localization** *International Conference on Automated Planning and Scheduling (ICAPS)*
  Dressel, L., Kochenderfer, M. J.
  2017
- **Learning Discrete Bayesian Networks from Continuous Data** *Journal of Artificial Intelligence Research*
  Chen, Y., Wheeler, T. A., Kochenderfer, M. J.
  2017; 59: 103-132
- **Probabilistic Airport Acceptance Rate Prediction** *AIAA Modeling and Simulation Conference*
  Cox, J., Kochenderfer, M. J.
  2016
- **Ground Delay Program Planning using Markov Decision Processes** *Journal of Aerospace Information Systems*
  Cox, J., Kochenderfer, M. J.
  2016; 13 (3): 134-142

- **Target Surveillance in Adversarial Environments using POMDPs** *AAAI Conference on Artificial Intelligence*
  Egorov, M., Kochenderfer, M. J., Uudmae, J. J.
  2016
- **Exploiting Anonymity in Approximate Linear Programming: Scaling to Large Multiagent MDPs** *AAAI Conference on Artificial Intelligence*
  Robbel, P., Oliehoek, F. A., Kochenderfer, M. J.
  2016
- **Simulation Comparison of Collision Avoidance Algorithms for Small Multi-Rotor Aircraft** *AIAA Modeling and Simulation Conference*
  Mueller, E., Kochenderfer, M. J.
  AIAA.2016
- **Policy Compression for Aircraft Collision Avoidance Systems** *Digital Avionics Systems Conference*
  Julian, K., Lopez, J., Brush, J. S., Owen, M., Kochenderfer, M. J.
  IEEE.2016
- **Analysis of Microscopic Behavior Models for Probabilistic Modeling of Driver Behavior** *IEEE International Conference on Intelligent Transportation Systems*
  Wheeler, T. A., Robbel, P., Kochenderfer, M. J.
  IEEE.2016
- **Factor Graph Scene Distributions for Automotive Safety Analysis** *IEEE International Conference on Intelligent Transportation Systems*
  Wheeler, T. A., Kochenderfer, M. J.
  IEEE.2016
- **Collision Avoidance for Unmanned Aircraft using Coordination Tables** *Digital Avionics Systems Conference*
  Tompa, R. E., Wulfe, B., Owen, M., Kochenderfer, M. J.
  IEEE.2016
- **Customer Simulation for Direct Marketing Experiments** *IEEE International Conference on Data Science and Advanced Analytics*
  Tkachenko, Y., Kochenderfer, M. J., Kluza, K.
  2016
- **Optimized and Trusted Collision Avoidance for Unmanned Aerial Vehicles using Approximate Dynamic Programming** *IEEE International Conference on Robotics and Automation*
  Sunberg, Z., Kochenderfer, M., Pavone, M.
  2016
- **Dynamic Logic Selection for Unmanned Aircraft Separation** *Digital Avionics Systems Conference*
  Owen, M. P., Kochenderfer, M. J.
  IEEE.2016
- **Markov Decision Process-Based Distributed Conflict Resolution for Drone Air Traffic Management** *Journal of Guidance, Control, and Dynamics*
  Ong, H., Kochenderfer, M. J.
  2016
- **Analysis of Recurrent Neural Networks for Probabilistic Modeling of Driver Behavior** *IEEE Transactions on Intelligent Transportation Systems*
  Morton, J., Wheeler, T. A., Kochenderfer, M. J.
  2016
- **Decision-Theoretic Approach to Designing Cyber Resilient Systems** *IEEE International Symposium on Network Computing and Applications*
  Mehta, V., Rowe, P., Lewis, G., Magalhaes, A., Kochenderfer, M.
  IEEE.2016
- **Learning Traffic Patterns at Small Airports from Flight Tracks** *IEEE Transactions on Intelligent Transportation Systems*
  Mahboubi, Z., Kochenderfer, M. J.
  2016
- **Improving Aircraft Collision Risk Estimation Using the Cross-Entropy Method** *Journal of Air Transportation*

Kim, Y., Kochenderfer, M. J.
2016; 24 (2): 55-61

- **Ground Delay Program Planning using Markov Decision Processes** *Journal of Aerospace Information Systems*
  Cox, J., Kochenderfer, M. J.
  2016; 13 (3): 134-142
- **Target Surveillance in Adversarial Environments using POMDPs** *AAAI Conference on Artificial Intelligence*
  Egorov, M., Kochenderfer, M. J., Uudmae, J. J.
  2016
- **Exploiting Anonymity in Approximate Linear Programming: Scaling to Large Multiagent MDPs** *AAAI Conference on Artificial Intelligence*
  Robbel, P., Oliehoek, F. A., Kochenderfer, M. J.
  2016
- **Signal Source Localization using Partially Observable Markov Decision Processes** *AIAA Infotech@Aerospace Conference,*
  Dressel, L., Kochenderfer, M. J.
  2015
- **Initial Scene Configurations for Highway Traffic Propagation** *IEEE International Conference on Intelligent Transportation Systems*
  Wheeler, T. A., Robbel, P., Kochenderfer, M. J.
  IEEE.2015
- **Optimal Aircraft Rerouting During Commercial Space Launches** *Digital Avionics Systems Conference*
  Tompa, R. E., Kochenderfer, M. J., Cole, R., Kuchar, J. K.
  IEEE.2015
- **Optimizing a Collision-Avoidance System for Closely Spaced Parallel Operations** *Journal of Aerospace Information Systems*
  Smith, K. A., Vela, A. E., Kochenderfer, M. J., Olson, W. A.
  2015; 12 (10): 618-633
- **Continuous Time Autonomous Air Traffic Control for Non-Towered Airports** *IEEE Conference on Decision and Control*
  Mahboubi, Z., Kochenderfer, M. J.
  IEEE.2015
- **Autonomous Air Traffic Control for Non-Towered Airports** *Air Traffic Management Research and Development Seminar*
  Mahboubi, Z., Kochenderfer, M. J.
  2015
- **Bayesian Preference Elicitation for Multiobjective Engineering Design Optimization** *Journal of Aerospace Information Systems*
  Lepird, J. R., Owen, M. P., Kochenderfer, M. J.
  2015; 12 (10): 634-645
- **Stress Testing Collision Avoidance Systems using Monte Carlo Tree Search** *Digital Avionics Systems Conference*
  Lee, R., Kochenderfer, M. J., Mengshoel, O. J., Brat, G. P., Owen, M. P.
  IEEE.2015
- **Optimization Approaches to the Single Airport Ground Holding Problem** *Journal of Guidance, Control, and Dynamics*
  Cox, J., Kochenderfer, M. J.
  2015; 38 (12): 2399-2406
- **A Probabilistic Framework for Microscopic Traffic Propagation** *IEEE International Conference on Intelligent Transportation Systems*
  Wheeler, T. A., Robbel, P., Kochenderfer, M. J.
  IEEE.2015
- **Decision Making Under Uncertainty: Theory and Application**
  Kochenderfer, M. J.
  MIT Press.2015
- **Optimal Lost-Link Policies for Unmanned Aircraft** *Digital Avionics Systems Conference*
  Kim, Y., Kochenderfer, M. J.

IEEE.2015

- **Control of Epidemics on Graphs** *IEEE Conference on Decision and Control*
  Ho, C., Kochenderfer, M. J., Mehta, V., Caceres, R. S.
  IEEE.2015
- **Error Model Estimation for Airborne Beacon-Based Surveillance** *IET Radar, Sonar and Navigation*
  Panken, A., Kochenderfer, M. J.
  2014; 8 (6): 667-675
- **Vertical State Estimation for Aircraft Collision Avoidance with Quantized Measurements** *Journal of Guidance, Control, and Dynamics*
  Asmar, D. M., Kochenderfer, M. J., Chryssanthacopoulos, J. P.
  2013; 35 (6): 1797-1802
- **Collision Avoidance System Optimization for Closely Spaced Parallel Operations through Surrogate Modeling** *AIAA Guidance, Navigation, and Control Conference*
  Smith, K., Kochenderfer, M. J., Olson, W., Vela, A.
  2013
- **Decentralized Control of Partially Observable Markov Decision Processes** *IEEE Conference on Decision and Control*
  Amato, C., Chowdhary, G., Geramifard, A., Ure, N. K., Kochenderfer, M. J.
  2013
- **Fielding a Sense and Avoid Capability for Unmanned Aircraft Systems: Policy, Standards, Technology, and Safety Modeling** *Air Traffic Control Quarterly*
  Cole, R., Kochenderfer, M. J., Weibel, R., Edwards, M., Griffith, J. D.
  2013; 21 (1): 5-27
- **Traffic Alert Optimization for Airborne Collision Avoidance Systems** *AIAA Guidance, Navigation, and Control Conference*
  Puntin, B., Kochenderfer, M. J.
  2013
- **Compression of Optimal Value Functions for Markov Decision Processes** *Data Compression Conference*
  Kochenderfer, M. J., Monath, N.
  2013
- **Optimizing the Next Generation Collision Avoidance System for Safe, Suitable, and Acceptable Operational Performance** *Air Traffic Management Research and Development Seminar*
  Holland, J. E., Kochenderfer, M. J., Olson, W. A.
  2013
- **Decomposition Methods for Optimized Collision Avoidance with Multiple Threats** *Journal of Guidance, Control, and Dynamics*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J.
  2012; 35 (2): 398-405
- **Predicting the Behavior of Interacting Humans by Fusing Data from Multiple Sources** *Conference on Uncertainty in Artificial Intelligence*
  Schlicht, E. J., Lee, R., Wolpert, D. H., Kochenderfer, M. J., Tracey, B.
  2012
- **Next Generation Airborne Collision Avoidance System** *Lincoln Laboratory Journal*
  Kochenderfer, M. J., Holland, J. E., Chryssanthacopoulos, J. P.
  2012; 19 (1): 17-33
- **Hazard Alerting Based on Probabilistic Models** *Journal of Guidance, Control, and Dynamics*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J.
  2012; 35 (2): 442-450
- **Collision Avoidance for General Aviation** *IEEE Aerospace and Electronic Systems Magazine*
  Billingsley, T. B., Kochenderfer, M. J., Chryssanthacopoulos, J. P.
  2012; 27 (7): 4-12

- **A New Approach for Designing Safer Collision Avoidance Systems** *Air Traffic Control Quarterly*
  Kochenderfer, M. J., Chryssanthacopoulos, J. P., Weibel, R. E.
  2012; 20 (1): 27-45
- **Partially-Controlled Markov Decision Processes for Collision Avoidance Systems** *International Conference on Agents and Artificial Intelligence*
  Kochenderfer, M. J., Chryssanthacopoulos, J. P.
  2011
- **Position Validation Strategies using Partially Observable Markov Decision Processes** *IEEE/AIAA Digital Avionics Systems Conference*
  Kochenderfer, M. J., Shih, K. J., Chryssanthacopoulos, J. P., Rose, C. E., Elder, T. R.
  2011
- **Unmanned Aircraft Collision Avoidance using Continuous-State POMDPs** *Robotics: Science and Systems*
  Bai, H., Hsu, D., Kochenderfer, M. J., Lee, W. S.
  2011
- **Analysis of Open-loop and Closed-loop Planning for Aircraft Collision Avoidance** *IEEE International Conference on Intelligent Transportation Systems*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J.
  2011
- **Accounting for State Uncertainty in Collision Avoidance** *Journal of Guidance, Control, and Dynamics*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J.
  2011; 34 (4): 951-960
- **Collision Avoidance System Optimization with Probabilistic Pilot Response Models** *American Control Conference*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J.
  2011
- **Aircraft Collision Avoidance using Monte Carlo Real-Time Belief Space Search** *Journal of Intelligent and Robotic Systems*
  Wolf, T. B., Kochenderfer, M. J.
  2011; 64 (2): 277-298
- **Efficiently Estimating Ambient Near Mid-Air Collision Risk for Unmanned Aircraft** *AIAA Aviation Technology, Integration, and Operations Conference*
  Maki, E., Weinert, A., Kochenderfer, M. J.
  2010
- **On Estimating Mid-Air Collision Risk** *AIAA Aviation Technology, Integration, and Operations Conference*
  Kochenderfer, M. J., Griffith, J. D., Olszta, J. E.
  2010
- **A Decision-Theoretic Approach to Developing Robust Collision Avoidance Logic** *IEEE International Conference on Intelligent Transportation Systems*
  Kochenderfer, M. J., Chryssanthacopoulos, J. P.
  2010
- **Collision Avoidance for Unmanned Aircraft using Markov Decision Processes** *AIAA Guidance, Navigation, and Control Conference*
  Temizer, S., Kochenderfer, M. J., Kaelbling, L. P., Lozano-Perez, T.
  2010
- **Improved Monte Carlo Sampling for Conflict Probability Estimation** *AIAA Non-Deterministic Approaches Conference*
  Chryssanthacopoulos, J. P., Kochenderfer, M. J., Williams, R. E.
  2010
- **Airspace Encounter Models for Estimating Collision Risk** *Journal of Guidance, Control, and Dynamics*
  Kochenderfer, M. J., Edwards, M., Espindle, L. P., Kuchar, J. K., Griffith, J. D.
  2010; 33 (2): 487-499
- **Robustness of Optimized Collision Avoidance Logic to Modeling Errors** *IEEE/AIAA Digital Avionics Systems Conference*

Kochenderfer, M. J., Chryssanthacopoulos, J. P., Radecki, P.
2010

- **Classification of Primary Radar Tracks using Gaussian Mixture Models** *IET Radar, Sonar and Navigation*
  Espindle, L. P., Kochenderfer, M. J.
  2009; 3 (6): 559-568
- **Hazard Alerting using Line-of-Sight Rate** *AIAA Guidance, Navigation, and Control Conference*
  Kochenderfer, M. J., Griffith, J. D., Kuchar, J. K.
  2008
- **A Comprehensive Aircraft Encounter Model of the National Airspace System** *Lincoln Laboratory Journal*
  Kochenderfer, M. J., Espindle, L. P., Kuchar, J. K., Griffith, J. D.
  2008; 17 (2): 41-53
- **Electro-Optical System Analysis for Sense and Avoid** *AIAA Guidance, Navigation, and Control Conference*
  Griffith, J. D., Kochenderfer, M. J., Kuchar, J. K.
  2008
- **Adaptive Modeling and Planning for Reactive Agents** *AAAI National Conference on Artificial Intelligence*
  Kochenderfer, M. J.
  2005
- **Common Sense Data Acquisition for Indoor Mobile Robots** *AAAI National Conference on Artificial Intelligence*
  Gupta, R., Kochenderfer, M. J.
  2004
- **Evolving Hierarchical and Recursive Teleo-Reactive Programs through Genetic Programming** *European Conference on Genetic Programming*
  Kochenderfer, M. J.
  Springer.2003