

References in the Recent Literature Using MOOS-IvP

The below references are all derived from Google Scholar and represent works that explicitly cite implemented systems using MOOS-IvP. Although MOOS-IvP is open, often the work built on it may not be, or may not be well-known. We strive to make MOOS-IvP users aware of each other to hopefully foster future collaborations. If you know of a work we missed below, please let us know.

2017 (8 items)

1. Joshua Brunstein. Robo-boats are setting sail in boston, September 2017.
2. Erin M. Fischell and Henrik Schmidt. Supervised machine learning for estimation of target aspect angle from bistatic acoustic scattering. *IEEE Journal of Oceanic Engineering*, PP(99):1–11, 2017.
3. James McMahon and Erio Plaku. Autonomous data collection with limited time for underwater vehicles. *IEEE Robotics and Automation Letters*, 2(1):112–119, January 2017.
4. Radu Calinescu, Simos Gerasimou, Ibrahim Habli, M Usman Iftikhar, Tim Kelly, and Danny Weyns. Engineering trustworthy self-adaptive software with dynamic assurance cases. *arXiv preprint arXiv:1703.06350*, 2017.
5. Radu Constantin Calinescu, Simos Gerasimou, Stephan Shevtsov, and Danny Weyns. Undersea: An exemplar for engineering self-adaptive unmanned underwater vehicles. In *12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)*, 2017.
6. Taejin Kim, Yeongjun Lee, Jeonghong Park, and Hyun-Taek Choi. A study on the effectiveness of moos-ivp for unmanned surface vehicle. In *2017 IEEE Underwater Technology (UT)*, pages 1–3, Daejeon, Korea, February 2017.
7. Lingyan Dong, Songli Jia, Hongli Xu, and Wenkang Yi. A design of control system for fixed double propellant unmanned surface vehicle based on moos-ivp. In *2017 2nd Asia-Pacific Conference on Intelligent Robot Systems (ACIRS)*, pages 146–150, June 2017.
8. Stephanie Kemna, John G. Rogers, Carlos Nieto-Granda, Stuart Young, and Gaurav S. Sukhatme. Multi-robot coordination through dynamic voronoi partitioning for informative adaptive sampling in communication-constrained environments. In *2017 IEEE International Conference on Robotics and Automation (ICRA)*, pages 2124–2130, May 2017.

2016 (26 items)

9. Kyle L. Woerner. *Multi-Contact Protocol-Constrained Collision Avoidance for Autonomous Marine Vehicles*. PhD thesis, Massachusetts Institute of Technology, 2016.
10. Henrik Schmidt, Michael R. Benjamin, Stephani M. Petillo, and Raymond Lum. Nested autonomy for distributed ocean sensing. In Nikolas I. Xiros Manhar R. Dhanak, editor, *Springer Handbook of Ocean Engineering*, pages 459–480. Springer, 2016.
11. João Borges de Sousa, João Pereira, José Pinto, Paulo Claro Lourenfo, João Madaleno Galocha, Jorge Fontes, Kanna Rajan, Tor Arne Johansson, Michael Incze, Konstantinos Pelekanakis, Andrea Munafo, and João Alves. Rapid environmental picture atlantic exercise 2015: a field report. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–6, 2016.
12. Gabriele Ferri, Andrea Munaf, Joao Alves, and Kevin LePage. A data-driven control strategy in synergy with continuous active sonar for littoral underwater surveillance. In *OCEANS*

- 2016 MTS/IEEE Monterey, pages 1–7, September 2016.
13. Daniel D. Sternlicht, Jose E. Fernandez, James L. Prater, Joshua N. Weaver, Jason C. Isaacs, Thomas C. Montgomery, Charles M. Loeffler, and Michael Purcell. Advanced sonar technologies for high clearance rate mine countermeasures. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–8, September 2016.
 14. Sam Reed and Val E. Schmidt. Providing nautical chart awareness to autonomous surface vessel operations. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–8. IEEE, 2016.
 15. Mark Snyder, Joshua N. Weaver, and Matthew J. Bays. Ros-ivp: Porting the interval programming suite into the robot operating system for maritime autonomy. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–6. IEEE, 2016.
 16. David Issa Mattos, Douglas Soares dosSantos, and Cairo L. Nascimento. Development of a low-cost autonomous surface vehicle using moos-ivp. In *2016 Annual IEEE Systems Conference (SysCon)*, pages 1–6, April 2016.
 17. Shuai Cao, Hongli Xu, Qingyong Jia, and Gong Chen. Design of portable auv remote control device based on moos-ivp. In *2016 IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER)*, pages 25–28, June 2016.
 18. Qingyong Jia, Hongli Xu, and Gong Chen. The development of a moos-ivp-based control system for a small autonomous underwater vehicle. In *OCEANS 2016 - Shanghai*, pages 1–5, April 2016.
 19. Kyle L. Woerner, Michael R. Benjamin, Michael Novitzky, and John J. Leonard. Collision avoidance road test for colregs-constrained autonomous vehicles. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–6, September 2016.
 20. Lonnie T. Parker, M. J. Ferro, and Scott R. Sideleau. Testing multi-agent autonomy in complex communications environments. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–5, September 2016.
 21. Arthur Anderson, Erin Fischell, Thom Howe, Tom Miller, Arturo Parrales-Salinas, Nick Rypkema, David Barrett, Michael Benjamin, Alex Brennen, Michael DeFillipo, John J. Leonard, Liam Paull, Henrik Schmidt, Nick Wang, and Alon Yaari. *An Overview of MIT-Olin’s Approach in the AUVSI RobotX Competition*, pages 61–80. Springer International Publishing, 2016.
 22. Erin M. Fischell and Henrik Schmidt. Auv behaviors for collection of bistatic and multistatic acoustic scattering data from seabed targets. In *2016 IEEE International Conference on Robotics and Automation (ICRA)*, pages 2645–2650, May 2016.
 23. Ryan Mabry, Jesse Ardonne, Joshua N. Weaver, Drew Lucas, and Matthew J. Bays. Maritime autonomy in a box: Building a quickly-deployable autonomy solution using the docker container environment. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–6, September 2016.
 24. James McMahon and Erion Plaku. Mission and motion planning for autonomous underwater vehicles operating in spatially and temporally complex environments. *IEEE Journal of Oceanic Engineering*, 41(4):893–912, 2016.
 25. Henrik Schmidt and Toby Schneider. Acoustic communication and navigation in the new arctic; a model case for environmental adaptation. In *2016 IEEE Third Underwater Communications and Networking Conference (UComms)*, pages 1–4, August 2016.
 26. Behzad Bayat, Alessandro Crespi, and Auke Ijspeert. Envirobot: A bio-inspired environmental monitoring platform. In *2016 IEEE/OES Autonomous Underwater Vehicles (AUV)*, pages

- 381–386, November 2016.
27. Oscar A. Viquez, Erin M. Fischell, Nicholas R. Rypkema, and Henrik Schmidt. Design of a general autonomy payload for low-cost auv r&d. In *Autonomous Underwater Vehicles (AUV), 2016 IEEE/OES*, pages 151–155. IEEE, 2016.
 28. Hong Liu, Tianyu Yang, and Jing Wang. Model checking for the fault tolerance of collaborative auvs. In *2016 IEEE 17th International Symposium on High Assurance Systems Engineering (HASE)*, pages 244–245, January 2016.
 29. Paolo Izzo, Hongyang Qu, and Sandor M. Veres. Reducing complexity of autonomous control agents for verifiability. *arXiv preprint arXiv:1603.01202*, 2016.
 30. Eirik Hexeberg Henriksen, Ingrid Schjlberg, and Tor Berge Gjersvik. Uw morse: The underwater modular open robot simulation engine. In *2016 IEEE/OES Autonomous Underwater Vehicles (AUV)*, pages 261–267, November 2016.
 31. Brooks Reed, Josh Leighton, Milica Stojanovic, and Franz Hover. Multi-vehicle dynamic pursuit using underwater acoustics. In *Robotics Research*, pages 79–94. Springer, 2016.
 32. E. Wolbrecht, J. Osborn, S. Qualls, R. Ross, J. Canning, M. Anderson, and Dean Edwards. Estimating and compensating for water currents: Field testing. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–5. IEEE, 2016.
 33. Stephanie Kemna, David A. Caron, and Gaurav S. Sukhatme. Adaptive informative sampling with autonomous underwater vehicles: Acoustic versus surface communications. In *OCEANS 2016 MTS/IEEE Monterey*, pages 1–8. IEEE, 2016.
 34. Qingzhe Zhen and Dapeng Jiang. A realistic framework for collaborative control of multiple auv system with primary experimental results. In *OCEANS 2016 - Shanghai*, pages 1–5. IEEE, April 2016.

2015 (28 items)

35. Roberto Petroccia, Giannia Cario, Marco Lupia, Vladimir Djapic, and Chiara Petrioli. First in-field experiments with a bilingual underwater acoustic modem supporting the janus standard. In *OCEANS 2015-Genova*, pages 1–7. IEEE, 2015.
36. Daniel L. Codiga. A marine autonomous surface craft for long-duration, spatially explicit, multidisciplinary water column sampling in coastal and estuarine systems. *Journal of Atmospheric and Oceanic Technology*, 32(3):627–641, 2015.
37. Arthur D. Anderson. *The effect of Towed Array Orientation on the 3D Acoustic Picture for Sound Sources and the Vertical Ambient Noise Profile*. PhD thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2015.
38. Michael L. Incze, Scott R. Sideleau, Chris Gagner, and Charles A. Pippin. Communication and collaboration of heterogeneous unmanned systems using the joint architecture for unmanned systems (jaus) standards. In *OCEANS 2015-Genova*, pages 1–6, 2015.
39. Damian Manda, May-Win Thein, and Andrew Armstrong. Depth adaptive hydrographic survey behavior for autonomous surface vessels. In *OCEANS’15 MTS/IEEE Washington*, pages 1–7. IEEE, 2015.
40. Bo Li, Yuanxin Xu, Chenzhan Liu, Shuangshuang Fan, and Wen Xu. Terminal navigation and control for docking an underactuated autonomous underwater vehicle. In *2015 IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER)*, pages 25–30, June 2015.

41. Radu Calinescu, Simos Gerasimou, and Alec Banks. Self-adaptive software with decentralised control loops. In *International Conference on Fundamental Approaches to Software Engineering*, pages 235–251. Springer, 2015.
42. J. Osborn, S. Qualls, J. Canning, M. Anderson, D. Edwards, and E. Wolbrecht. Auv state estimation and navigation to compensate for ocean currents. In *OCEANS 2015 - MTS/IEEE Washington*, pages 1–5, October 2015.
43. Mohamed Saad IBN SEDDIK. *Localization of a Swarm of Underwater Robots Using Set-Membership Methods*. PhD thesis, ENSTA Bretagne, 2015.
44. Chris Moore and Peter McKibbin. Artemis auv payload development. In *OCEANS 2015 - MTS/IEEE Washington*, pages 1–3, October 2015.
45. Kyle L. Woerner and Michael R. Benjamin. Autonomous collision avoidance tradespace analysis for high-speed vessels. In *13th International Conference on Fast Sea Transportation. Society of Naval Architects and Marine Engineers*, 2015.
46. Mae L. Seto and A. Crawford. Autonomous shallow water bathymetric measurements for environmental assessment and safe navigation using usvs. In *OCEANS'15 MTS/IEEE Washington*, pages 1–5. IEEE, 2015.
47. Jame McMahan and Erion Plaku. Autonomous underwater vehicle mine countermeasures mission planning via the physical traveling salesman problem. In *OCEANS'15 MTS/IEEE Washington*, pages 1–5. IEEE, 2015.
48. Stephanie Petillo, Henrik Schmidt, and Arjuna Balasuriya. Constructing a distributed auv network for underwater plume-tracking operations. *International Journal of Distributed Sensor Networks*, 8(1), January 2015.
49. Michael Novitzky. *TAR: Trajectory Adaptation for Recognition of Robot Tasks to Improve Teamwork*. PhD thesis, Georgia Institute of Technology, December 2015.
50. Erin M. Fischell and Henrik Schmidt. Classification of underwater targets from autonomous underwater vehicle sampled bistatic acoustic scattered fields. *The Journal of the Acoustical Society of America*, 138(6):3773–3784, 2015.
51. Erin Marie Fischell. *Characterization of underwater target geometry from autonomous underwater vehicle sampling of bistatic acoustic scattered fields*. PhD thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2015.
52. Brooks Louis-Kiguchi Reed. *Controller Design for Underwater Vehicle Systems with Communication Constraints*. PhD thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2015.
53. Dainis Nams, Mae L. Seto, and John J. Leonard. On-line adaptation of underwater acoustic transmission rates to optimize communications for collaborative auv missions. In *OCEANS 2015 - MTS/IEEE Washington*, pages 1–8, October 2015.
54. Paolo Braca, Ryan Goldhahn, Gabriele Ferri, and Kevin D. LePage. Distributed information fusion in multistatic sensor networks for underwater surveillance. *IEEE Sensors Journal*, 16(11):4003–4014, 2015.
55. Nicholas Rahardiyana Rypkema. Distributed autonomy and formation control of a drifting swarm of autonomous underwater vehicles. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2015.
56. Jacob Gerlach. Autonomous data collection techniques for approximating marine vehicle kinematics. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts,

- 2015.
57. Liam Paull, Guoquan Huang, Mae Seto, and John J. Leonard. Communication-constrained multi-aUV cooperative slam. In *Robotics and Automation (ICRA), 2015 IEEE International Conference on*, pages 509–516. IEEE, 2015.
 58. Stephanie Kemna, David A. Caron, and Gaurav S. Sukhatme. Constraint-induced formation switching for adaptive environmental sampling. In *MTS/IEEE Oceans’15 Genova*, 2015.
 59. Mei Yi Cheung, Joshua Leighton, and Franz S. Hover. Decentralized multi-vehicle dynamic pursuit using acoustic tdoa measurements. In *Intelligent Robots and Systems (IROS), 2015 IEEE/RSJ International Conference on*, pages 4858–4863. IEEE, 2015.
 60. Kerry Noonan Bosch. Signature redacted-hesis supervisor. Master’s thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2015.
 61. Stephanie M. Petillo. Autonomous & adaptive oceanographic feature tracking on board autonomous underwater vehicles. Technical report, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution, February 2015.
 62. Stephanie Petillo, Henrik Schmidt, Pierre Lermusiaux, Dana Yoerger, and Arjuna Balasuriya. Autonomous & adaptive oceanographic front tracking on board autonomous underwater vehicles. In *OCEANS 2015-Genova*, pages 1–10. IEEE, 2015.

2014 (21 items)

63. Liam Paull. *Robust Online Adaptive Sensor-Driven Survey Planning for Single and Multiple Autonomous Underwater Vehicles*. PhD thesis, University of New Brunswick, 2014.
64. Gabriele Ferri, Andrea Munaf, Ryan Goldhahn, and Kevin LePage. Results from collab13 sea trial on tracking underwater targets with auvs in bistatic sonar scenarios. In *2014 Oceans - St. John’s*, pages 1–9, September 2014.
65. Andrea Munaf, Jan Sliwka, Gabriele Ferri, Arjan Vermeij, Ryan Goldhahn, Kevin LePage, Joao Alves, and John Potter. Enhancing auv localization using underwater acoustic sensor networks: Results in long baseline navigation from the collab13 sea trial. In *2014 Oceans - St. John’s*, pages 1–7, September 2014.
66. Chris Murphy, Jeffrey M. Walls, Toby Schneider, Ryan M. Eustice, Milica Stojanovic, and Hanumant Singh. Capture: A communications architecture for progressive transmission via underwater relays with eavesdropping. *IEEE Journal of Oceanic Engineering*, 39(1):120–130, January 2014.
67. Anthony Spears, Ayanna M. Howard, Britney Schmidt, Matthew Meister, Michael West, and Thomas Collins. Design and development of an under-ice autonomous underwater vehicle for use in polar regions. In *2014 OCEANS - St. John’s*, pages 1–6, September 2014.
68. Kyle Woerner. Colregs-compliant autonomous collision avoidance using multi-objective optimization with interval programming. Master’s thesis, Massachusetts Institute of Technology, Cambridge MA, June 2014.
69. Kyle Woerner and Michael Benjamin. Safety and efficiency analysis of autonomous collision avoidance using multi-objective optimization with interval programming. *Naval Engineers Journal*, 126(4):163–168, 2014.
70. Mark A. Wilson, James McMahan, and David W. Aha. Bounded expectations for discrepancy detection in goal-driven autonomy. Technical report, Naval Research Lab, Washington DC, 2014.

71. Erin M. Fischell, Stephanie Petillo, Thomas Howe, and Henrik Schmidt. Mapping bistatic scattering from spherical and cylindrical targets using an autonomous underwater vehicle in bayex'14 experiment. *The Journal of the Acoustical Society of America*, 136(4):2110–2110, 2014.
72. J. Hudson and Mae L. Seto. Underway path-planning for an unmanned surface vehicle performing cooperative navigation for uuvs at varying depths. In *2014 IEEE/RSJ International Conference on Intelligent Robots and Systems*, pages 2298–2305. IEEE, September 2014.
73. Michael Novitzky, Charles Pippin, Thomas R. Collins, Tucker R. Balch, and Michael E. West. Conditional random fields for behavior recognition of autonomous underwater vehicles. In *Distributed Autonomous Robotic Systems*, pages 409–421. Springer, 2014.
74. Stephanie Petillo and Henrik Schmidt. Exploiting adaptive and collaborative auv autonomy for detection and characterization of internal waves. *IEEE Journal of Oceanic Engineering*, 39(1):150–164, 2014.
75. Simos Gerasimou, Radu Calinescu, and Alec Banks. Efficient runtime quantitative verification using caching, lookahead, and nearly-optimal reconfiguration. In *Proceedings of the 9th International Symposium on Software Engineering for Adaptive and Self-Managing Systems - SEAMS 2014*, pages 115–124, New York, New York, USA, 2014. ACM Press.
76. Liam Paull, Mae Seto, and John J. Leonard. Decentralized cooperative trajectory estimation for autonomous underwater vehicles. In *Intelligent Robots and Systems (IROS 2014), 2014 IEEE/RSJ International Conference on*, pages 184–191. IEEE, 2014.
77. Dapeng Jiang and Bin He. Realistic cooperative control mechanism of multiple auvs. In *Proceedings of the 33rd Chinese Control Conference*, pages 1395–1400, July 2014.
78. Paolo Braca, Peter Willett, Kevin D. LePage, Stefano Marano, and Vincenzo Matta. Bayesian tracking in underwater wireless sensor networks with port-starboard ambiguity. *IEEE Trans. Signal Processing*, 62(7):1864–1878, 2014.
79. Dainis Nams. Online bandwidth adaptation and data tracking of underwater acoustic transmissions to optimize collaborative auv missions. Master's thesis, Dalhousie University, December 2014.
80. Hyun-Taek Choi and Joono Sur. Issues in software architectures for intelligent underwater robots. In *Robot Intelligence Technology and Applications 2*, pages 831–839. Springer, 2014.
81. Michael Novitzky, Charles Pippin, Thomas R. Collins, Tucker R. Balch, and Michael E. West. Auv behavior recognition using behavior histograms, hmms, and crfs. *Robotica*, 32(2):291–304, March 2014.
82. Jiyeon Kim and Dongik Lee. The effectiveness of moos-ivp based design of control system for unmanned underwater vehicles tt. *IEMEK Journal of Embedded Systems and Applications*, 9:157–163, 2014.
83. Ming Zhang, Yuanxin Xu, Bo Li, Danna Wang, and Wen Xu. A modular autonomous underwater vehicle for environmental sampling: System design and preliminary experimental results. In *OCEANS 2014 - TAIPEI*, pages 1–5. IEEE, April 2014.

2013 (16 items)

84. Tawfig Taher, Gabriel D. Weymouth, and Tony Varghese. Novel platform for ocean survey and autonomous sampling using multi-agent system. In *2013 MTS/IEEE OCEANS - Bergen*, pages 1–5. IEEE, June 2013.

85. Joshua Leighton. System design of an unmanned aerial vehicle (uav) for marine environmental sensing. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, February 2013.
86. Vladimir Djapic, Dula Na, Gabriele Ferri, Edmin Omerdic, Gerard Dooly, Dan Toal, and Zoran Vukic. Novel method for underwater navigation aiding using a companion underwater robot as a guiding platforms. In *2013 MTS/IEEE OCEANS - Bergen*, pages 1–10, June 2013.
87. Toby Edwin Schneider. *Advances in integrating autonomy with acoustic communications for intelligent networks of marine robots*. PhD thesis, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, 2013.
88. Mark Wilson, Bryan Auslander, Benjamin Johnson, Thomas Apker, James McMahan, and David W. Aha. Towards applying goal autonomy for vehicle control. In *Goal Reasoning: Papers from the ACS Workshop*, page 127, 2013.
89. T. Schneider and H. Schmidt. Model-based adaptive behavior framework for optimal acoustic communication and sensing by marine robots. *IEEE Journal of Oceanic Engineering*, 38(3):522–533, July 2013.
90. Mei Yi Cheung. Autonomous adaptive acoustic relay positioning. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2013.
91. Eric Gilbertson, Brooks L. Reed, Josh Leighton, Mei Yi Cheung, and Franz S. Hover. Experiments in dynamic control of autonomous marine vehicles using acoustic modems. In *Robotics and Automation (ICRA), 2013 IEEE International Conference on*, pages 5131–5137. IEEE, 2013.
92. Michael A. Filimon. Site planning and on-board collision avoidance software to optimize autonomous surface craft surveys. Master's thesis, University of Rhode Island, 2013.
93. Gabriele Ferri and Vladimir Djapic. Adaptive mission planning for cooperative autonomous maritime vehicles. In *Robotics and Automation (ICRA), 2013 IEEE International Conference on*, pages 5586–5592. IEEE, 2013.
94. Erion Plaku and James McMahan. Combined mission and motion planning to enhance autonomy of underwater vehicles operating in the littoral zone. In *Workshop on Combining Task and Motion Planning at IEEE International Conference on Robotics and Automation (ICRA13)*, 2013.
95. Sheida Anya Danesh. Real time active sonar simulation in a deep ocean environment. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2013.
96. Arthur D. Anderson. Cooperative autonomous tracking and prosecution of targets using range-only sensors. Master's thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2013.
97. Michael A. Filimon and Daniel L. Codiga. Moos-ivp helm based simulations of collision avoidance by an autonomous surface craft performing repeat-transect oceanographic surveys. In *MOOS Developers and Applications Working Group (MOOS-DAWG)*, Cambridge MA, July 2013.
98. Ryan Goldhahn, Stephanie Kemna, and Arjan Vermeij. Autonomous vehicle mission configuration at the cmre using moos-ivp. Technical report, Centre for Maritime Research and Experimentation (CMRE), 2013.
99. Anthony Spears, Michael West, and Thomas Collins. Autonomous control and simulation of the videoray pro iii vehicle using moos and ivp helm. In *2013 OCEANS - San Diego*, pages

1–10, September 2013.

2012 (8 items)

100. Andrew J. Privette. Autonomous adaptation and collaboration of unmanned vehicles for tracking submerged contacts. Master's thesis, Massachusetts Institute of Technology, Cambridge MA, May 2012.
101. Michael R. Benjamin, Henrik Schmidt, Paul M. Newman, and John J. Leonard. *Unmanned Marine Vehicle Autonomy with MOOS-IvP*, chapter 2, pages 1–100. Springer, 2012.
102. Jonathan Hudson. Adaptive path planning for an autonomous marine vehicle performing cooperative navigation for autonomous underwater vehicle. Master's thesis, Dalhousie University, Halifax, Nova Scotia, Canada, 2012.
103. Michael Novitzky, Charles Pippin, Thomas R. Collins, Tucker R. Balch, and Michael E. West. Bio-inspired multi-robot communication through behavior recognition. In *2012 IEEE International Conference on Robotics and Biomimetics (ROBIO)*, pages 771–776, December 2012.
104. Camila Francolin, Anil V. Rao, Christiane Duarte, and Gerald Martel. Optimal control of an autonomous surface vehicle to improve connectivity in an underwater vehicle network. *Journal of Aerospace Computing, Information, and Communication*, 9(1):1–13, 2012.
105. Matthew Jason Bays. *Stochastic Motion Planning for Applications in Subsea Survey and Area Protection*. PhD thesis, Virginia Polytechnic Institute and State University, 2012.
106. Matthew Gildner, Gabriel Weymouth, and Nichoas Patrikalakis. Multi-vehicle autonomous sampling of a coastal thermal and effluent jet and plume. In *2012 Oceans*, pages 1–9, October 2012.
107. Michael Mullins, Kyle Foerster, Naima Kaabouch, and William Semke. Incorporating terrain avoidance into a small uas sense and avoid system. In *Infotech@ Aerospace 2012*. Aerospace Research Central, 2012.

2011 (9 items)

108. Michael Novitzky, Charles Pippin, Tucker Balch, Thomas Collins, and Michael E. West. Behavior recognition of an auv using a forward-looking sonar. In *Workshops at the Robotics: Science and Systems. Los Angeles, CA*, 2011.
109. Liam Paull, Sajad Saeedi, Mae Seto, and Howard Li. *A Multi-agent Framework with MOOS-IvP for Autonomous Underwater Vehicles with Sidescan Sonar Sensors*, pages 41–50. Springer Berlin Heidelberg, Berlin, Heidelberg, 2011.
110. Michael E. West, Thomas R. Collins, John R. Bogle, Andrew Melim, and Michael Novitzky. An overview of autonomous underwater vehicle systems and sensors at georgia tech. Technical report, Georgia Institute of Technology, 2011.
111. Terry Huntsberger and Gail Woodward. Intelligent autonomy for unmanned surface and underwater vehicles. In *OCEANS 2011*, pages 1–10. IEEE, 2011.
112. Mejd Ben Ardhaoui. Implementation of autonomous navigation and mapping using a laser line scanner on a tactical unmanned aerial vehicle. Master's thesis, Naval Postgraduate School, Monterey, California, December 2011.
113. Kyle David DeMedeiros, Chris Duarte, and Ramprasad Balasubramanian. Refueling strategies for a team of cooperating auvs. Technical report, UMASS Dartmouth, 2011.

114. Stephanie Kemna, Michael J. Hamilton, David T. Hughes, and Kevin D. LePage. Adaptive autonomous underwater vehicles for littoral surveillance. *Intelligent Service Robotics*, 4(4):245–258, 2011.
115. Stephanie Petillo, Henrik Schmidt, and Arjuna Balasuriya. Constructing a distributed auv network for underwater plume-tracking operations. *International Journal of Distributed Sensor Networks*, 2011.
116. Mae L. Seto, Jonathan A. Hudson, and Yajun Pan. Three-dimensional path-planning for a communications and navigation aid working cooperatively with autonomous underwater vehicles. In *Proceedings of the Second International Conference on Autonomous and Intelligent Systems*, AIS’11, pages 51–62, Burnaby, BC, Canada, 2011. Springer-Verlag.

2010 (17 items)

117. Vladimir Djapic and Dula Nad. Command filtered backstepping design in moos-ivp helm framework for trajectory tracking of usvs. *American Control Conference (ACC), 2010*, pages 5997–6003, 2010.
118. Toby Schneider and Henrik Schmidt. Unified command and control for heterogeneous marine sensing networks. *Journal of Field Robotics*, 27(6):876–889, November 2010.
119. Georgios Papadopoulos. Underwater vehicle localization using range measurements. Master’s thesis, Massachusetts Institute of Technology, 2010.
120. Maurice F. Fallon, Georgios Papadopoulos, and John J. Leonard. A measurement distribution framework for cooperative navigation using multiple auvs. In *Robotics and Automation (ICRA), 2010 IEEE International Conference on*, pages 4256–4263. IEEE, 2010.
121. Arjuna Balasuriya, Stephanie Petillo, Henrik Schmidt, and Michael Benjamin. Behavior-based planning and prosecution architecture for autonomous underwater vehicles in ocean observatories. In *OCEANS 2010 IEEE - Sydney*, pages 1–5, May 2010.
122. Dapeng Jiang, Yongjie Pang, and Zaibai Qin. Coordinated control of multiple autonomous underwater vehicle system. In *2010 8th World Congress on Intelligent Control and Automation*, pages 4901–4906, July 2010.
123. Toby Schneider and Henrik Schmidt. Unified command and control for heterogeneous marine sensing networks. *Journal of Field Robotics*, 27(6):876–889, 2010.
124. Brandon Morton, Terence Soule, Anthony Kanago, James Frenzel, and Dean Edwards. Ordering autonomous underwater vehicle inspection locations with a genetic algorithm. In *OCEANS 2010*, pages 1–6. IEEE, 2010.
125. David T. Hughes, Stephanie Kemna, Michael Hamilton, and R. Been. Sensible behaviour strategies for auvs in asw scenarios. In *OCEANS 2010 IEEE - Sydney*, pages 1–7, May 2010.
126. Dapeng Jiang, Yongjie Pang, and Zaibai Qin. Coordination of multiple auvs based on moos-ivp. In *IEEE ICCA 2010*, pages 370–375, June 2010.
127. Dapeng Jiang, Yongjie Pang, and Zaibai Qin. Application of moos-ivp architecture in multiple autonomous underwater vehicle cooperation. In *2010 Chinese Control and Decision Conference, CCDC 2010*, pages 1802–1807, 2010.
128. Toby Schneider, Henrik Schmidt, Thomas Pastore, and Michael Benjamin. Cooperative autonomy for contact investigation. In *OCEANS 2010 IEEE - Sydney*, pages 1–7, May 2010.
129. Thomas Pastore and Vladimir Djapic. Improving autonomy and control of autonomous surface vehicles in port protection and mine countermeasure scenarios. *Journal of Field Robotics*,

- 27(6):903–914, 2010.
130. Michael Hamilton, Stephanie Kemna, and David Hughes. Antisubmarine warfare applications for autonomous underwater vehicles: the glint09 sea trial results. *Journal of Field Robotics*, 27(6):890–902, 2010.
 131. Donald P. Eickstedt and Scott R. Sideleau. The backseat control architecture for autonomous robotic vehicles: A case study with the iver2 auv. *Marine Technology Society Journal*, 44(4):42–54, 2010.
 132. Jeffery DeArruda. Oceanserver iver2 autonomous underwater vehicle remote helm functionality. In *OCEANS 2010 MTS/IEEE SEATTLE*, pages 1–5, September 2010.
 133. Vladimir Djapic and Dula Nad. Using collaborative autonomous vehicles in mine countermeasures. In *OCEANS 2010 IEEE-Sydney*, pages 1–7. IEEE, 2010.

2009 (4 items)

134. James Frenzel, Kyle R. Fazzari, and Dean B. Edwards. Sharing clearance data between multiple autonomous platforms. In *Proc. 16th Intl. Symp. Unmanned Untethered Submersible Tech. (UUST09)*, 2009.
135. Ding Wang, Pierre F.J. Lermusiaux, Patrick J. Haley, Donald Eickstedt, Wayne G. Leslie, and Henrik Schmidt. Acoustically focused adaptive sampling and on-board routing for marine rapid environmental assessment. *Journal of Marine Systems*, 78, Supplement:S393 – S407, 2009.
136. Alexander Bahr. *Cooperative Localization for Autonomous Underwater Vehicles*. PhD thesis, Massachusetts Institute of Technology, 2009.
137. David Hughes, Francesco Baralli, Stephanie Kemna, Michael Hamilton, and Arjan Vermeij. Collaborative multistatic asw using auvs: demonstrating necessary technologies, 2009.

2008 (5 items)

138. Andrew Shafer. Autonomous cooperation of heterogeneous platforms for sea-based search tasks. Master’s thesis, Massachusetts Institute of Technology, Cambridge MA, June 2008.
139. Andrew Shafer, Michael Benjamin, and John Leonard. Autonomous cooperation of heterogeneous platforms for sea-based search tasks. In *MTS/IEEE OCEANS 2008, Quebec City, Canada, September 2008*, Quebec City, Canada, September 2008.
140. Terry Huntsberger, Hrand Aghazarian, Andres Castano, Gail Woodward, Curtis Padgett, Dan Gaines Dan, and Christine Buzzell. Intelligent autonomy for unmanned sea surface and underwater vehicles. *AUVSI Unmanned Systems North America*, 2008.
141. Joseph Curcio, Toby Schneider, Michael Benjamin, and Andrew Patrikalakis. Autonomous surface craft provide flexibility to remote adaptive oceanographic sampling and modeling. In *OCEANS 2008*, pages 1–7. IEEE, 2008.
142. Robert Been, David T. Hughes, and Arjan Vermeij. Heterogeneous underwater networks for asw: technology and techniques. *Nato Undersea Research Centre, Tech. Rep.*, June 2008.

2007 (3 items)

143. Maria Alejandra Parra-Orlandoni. Target tracking onboard an autonomous underwater vehicle: determining optimal towed array heading in an anisotropic noise field. Master’s thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2007.

144. Michael Benjamin, David Battle, Don Eickstedt, Henrik Schmidt, and Arjuna Balasuriya. Autonomous control of an unmanned underwater vehicle towing a vector sensor array. In *International Conference on Robotics and Automation (ICRA)*, Rome, Italy, April 2007.
145. Don Eickstedt, Michael Benjamin, Ding Wang, Henrik Schmidt, and Joseph Curcio. Behavior based adaptive control for autonomous oceanographic sampling. In *International Conference on Robotics and Automation (ICRA)*, Rome, Italy, April 2007.

2006 (6 items)

146. Peter Osagie. Distributed control for networked autonomous vehicles. Master's thesis, Numerisk analys och datalogi, Kungliga Tekniska högskolan, 2006.
147. Andrew J. Poulsen, Donald P. Eickstedt, and Jack P. Ianniello. Bearing stabilization and tracking for an auv with an acoustic line array. In *OCEANS 2006*, pages 1–6, September 2006.
148. Donald P. Eickstedt, Michael R. Benjamin, Henrik Schmidt, and John J. Leonard. Adaptive control of heterogeneous marine sensor platforms in an autonomous sensor network. In *IEEE/RJS International Conference on Intelligent Robots and Systems*, Beijing, China, October 2006.
149. Donald Patrick Eickstedt. *Adaptive Sampling in Autonomous Marine Sensor Networks*. PhD thesis, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, 2006.
150. Donald P. Eickstedt and Michael R. Benjamin. Cooperative target tracking in a distributed autonomous sensor network. In *MTS/IEEE OCEANS*, Boston, MA, September 2006.
151. Donald P. Eickstedt, Michael R. Benjamin, Jack P. Iannello, Henrik Schmidt, and John J. Leonard. Adaptive tracking of underwater targets with autonomous sensor networks. *Journal of Underwater Acoustics*, 56:465–495, 2006.