

Ankur Mehta: Curriculum Vitae

Journal Papers and Book Chapters

- Mehta, Ankur M., Joseph DelPreto, Kai Weng Wong, Scott Hamill, Hadas Kress-Gazit, and Daniela Rus. "Robot Creation from Functional Specifications". In: *Robotics Research: Volume 2*. Ed. by Antonio Bicchi and Wolfram Burgard. Cham: Springer International Publishing, 2018, pp. 631–648.
- Mehta, Ankur M., Daniela Rus, Kartik Mohta, Yash Mulgaonkar, Matthew Piccoli, and Vijay Kumar. "A Scripted Printable Quadrotor: Rapid Design and Fabrication of a Folded MAV". In: *Springer Tracts in Advanced Robotics*. Springer Science + Business Media, 2016, pp. 203–219.
- Mehta, Ankur, Nicola Bezzo, Peter Gebhard, Byoungkwon An, Vijay Kumar, Insup Lee, and Daniela Rus. "A Design Environment for the Rapid Specification and Fabrication of Printable Robots". In: *Experimental Robotics: The 14th International Symposium on Experimental Robotics*. Ed. by M. Ani Hsieh, Oussama Khatib, and Vijay Kumar. Cham: Springer International Publishing, 2016, pp. 435–449.
- Kehl, Florian, Ankur M. Mehta, and Kristofer S. J. Pister. "An Attitude Controller for Small Scale Rockets". In: *Springer Tracts in Advanced Robotics*. Springer Science + Business Media, 2015, pp. 201–214.
- Bezzo, Nicola, Ankur M. Mehta, Cagdas Denizel Onal, and Michael Thomas Tolley. "Robot Makers: The Future of Digital Rapid Design and Fabrication of Robots". In: *IEEE Robotics & Automation Magazine* 22.4 (Dec. 2015), pp. 27–36.
- Mehta, Ankur M., Joseph DelPreto, and Daniela Rus. "Integrated Codesign of Printable Robots". In: *J. Mechanisms Robotics* 7.2 (Feb. 2015), p. 021015.
- Mehta, Ankur M., Branko Kerkez, Steven D. Glaser, and Kristofer S. J. Pister. "TDMA-Based Dual-Mode Communication for Mobile Wireless Sensor Networks". In: *Sensors* 12.12 (Nov. 2012), pp. 16194–16210.
- Zarovy, S., M. Costello, and Ankur M. Mehta. "Experimental method for studying gust effects on micro rotorcraft". In: *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering* 227.4 (Mar. 2012), pp. 703–713.
- Mehta, Ankur M. and Jenny Hu. "What is the Surface Tension of this Kitty?" In: *4th Review of April Fool's Day Transactions* (Apr. 2009).

Conference Proceedings

- Mehta, Ankur M. et al. "Talos: Full Stack Robot Design, Compilation, and Verification". In: *submission*. 2018.
- Chang, T.-K., S. Chen, and Ankur Mehta. "Multirobot Cooperative Localization Algorithm with Explicit Communication and its Topology Analysis". In: *2017 International Symposium on Robotic and Research*. Dec. 2017.
- Schulz, Adriana, Cynthia Sung, Andrew Spielberg, Wei Zhao, Yu Cheng, Ankur Mehta, Eitan Grinspun, Daniela Rus, and Wojciech Matusik. "Interactive Robogami: Data-driven Design for 3D Print and Fold Robots with Ground Locomotion". In: *SIGGRAPH 2015: Studio*. Los Angeles, California: ACM, 2015.

- Sanneman, L., D. Ajilo, J. DelPreto, A. Mehta, S. Miyashita, N. A. Poorheravi, C. Ramirez, Sehyuk Yim, S. Kim, and D. Rus. "A Distributed Robot Garden System". In: *2015 IEEE International Conference on Robotics and Automation (ICRA)*. May 2015, pp. 6120–6127.
- Mehta, Ankur M., Joseph DelPreto, Benjamin Shaya, and Daniela Rus. "Cogeneration of Mechanical, Electrical, and Software Designs for Printable Robots from Structural Specifications". In: *Intelligent Robots and Systems (IROS 2014)*. Chicago, IL, Sept. 2014, pp. 2892–2897.
- Mehta, Ankur M. and Daniela Rus. "An End-to-End System for Designing Mechanical Structures for Print-and-fold Robots". In: *Robotics and Automation (ICRA 2014)*. Hong Kong, China, June 2014.
- Mehta, Ankur M. and Kristofer S.J. Pister. "Frequency offset compensation for crystal-free 802.15.4 communication". In: *Advanced Technologies for Communications (ATC 2011)*. Da Nang, Vietnam, Aug. 2011, pp. 45–47.
- Massey, Travis L., Ankur M. Mehta, Thomas Watteyne, and Kristofer S. J. Pister. "Protocol-Agnostic Compression for Resource-Constrained Wireless Networks". In: *Global Telecommunications Conference (GLOBECOM 2010)*. Institute of Electrical & Electronics Engineers (IEEE), Dec. 2010.
- Mehta, Ankur M. and Kristofer S.J. Pister. "WARPWING: A complete open source control platform for miniature robots". In: *Intelligent Robots and Systems (IROS 2010)*. IEEE. Taipei, Taiwan, Oct. 2010, pp. 5169–5174.
- Zarovy, Sam, Mark Costello, Ankur M. Mehta, Greg Gremillion, Derek Miller, Badri Ranganathan, J. Sean Humbert, and Paul Samuel. "Experimental Study of Gust Effects on Micro Air Vehicles". In: *AIAA Atmospheric Flight Mechanics Conference*. Toronto, Canada: American Institute of Aeronautics and Astronautics (AIAA), Aug. 2010.
- Massey, Travis L., Ankur M. Mehta, Thomas Watteyne, and Kristofer S. J. Pister. "Packet Compression for Time-Synchronized Wireless Networks". In: *Sensor, Mesh and Ad Hoc Communications and Networks (SECON 2010)*. Boston, MA: Institute of Electrical & Electronics Engineers (IEEE), June 2010.
- Watteyne, T., S. Lanzisera, Ankur M. Mehta, and K. S. J. Pister. "Mitigating Multipath Fading through Channel Hopping in Wireless Sensor Networks". In: *Int'l Conf. on Communications (ICC 2010)*. Cape Town, South Africa, May 2010, pp. 1–5.
- Watteyne, Thomas, Ankur M. Mehta, and Kristofer S. J. Pister. "Reliability Through Frequency Diversity: Why Channel Hopping Makes Sense". In: *6th ACM Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN 2009)*. Tenerife, Canary Islands, Spain: ACM, Oct. 2009, pp. 116–123.
- Lanzisera, S., Ankur M. Mehta, and K. S. J. Pister. "Reducing Average Power in Wireless Sensor Networks through Data Rate Adaptation". In: *Int'l Conf. on Communications (ICC 2009)*. Dresden, Germany, June 2009, pp. 1–6.
- Mehta, Ankur M., S. Lanzisera, and K. S. J. Pister. "Steganography in 802.15.4 wireless communication". In: *Advanced Networks and Telecommunication Systems (ANTS 2008)*. Bombay, India, Dec. 2008, pp. 1–3.
- Bergbreiter, Sarah, Ankur M. Mehta, and Kristofer S. J. Pister. "PhotoBeacon: Design of an Optical System for Localization and Communication in Multi-robot Systems". In: *Proc. Robot Communication and Coordination (ROBOCOMM 2007)*. Athens, Greece: IEEE Press, 2007, 5:1–5:7.
- Mehta, Ankur M. and Kristofer SJ Pister. "Flexure-based two degree-of-freedom legs for walking microrobots". In: *ASME Int'l Mechanical Engineering Congress and Exposition*. Chicago, IL, Nov. 2006, pp. 441–450.
- Mehta, Ankur M. and Kristofer SJ Pister. "Planar Two Degree-of-Freedom Legs for Walking Microrobots". In: *IARP-IEEE/RAS-EURON Joint Workshop on Micro and Nano Robotics*. Paris, France, Oct. 2006.
- Wilhite, B.A., Ankur M. Mehta, D.J. Quinn, J.L. Hertz, M.S. Spearing, H.L. Tuller, M.A. Schmidt, and K.F. Jensen. "Development of a Membrane-Based Solid-Oxide Fuel Cell". In: *AICHE 2004 Annual Meeting*. Austin, TX, 2004.
- Wilhite, B.A., Ankur M. Mehta, D.J. Quinn, J.L. Hertz, M.S. Spearing, H.L. Tuller, M.A. Schmidt, and K.F. Jensen. "Development of a Membrane-Based Solid-Oxide Fuel Cell: Microfabrication and Performance Analysis". In: *2004 MRS Fall Meeting, M5.22*. Boston, MA, 2004.