# Shervin Javdani

6348 Aurelia St.
Pittsburgh, PA 15206
☎ (818)300-4763
☒ sjavdani@cmu.edu
Permanent ☒ sjavdani@gmail.com
⑪ www.cs.cmu.edu/ sjavdani

## Education

- 2011-Present **PhD in Robotics**, *The Robotics Institute, Carnegie Mellon University, GPA 4.0.* Advisors: J. Andrew (Drew) Bagnell and Siddhartha S. Srinivasa
  - 2011–2014 MS in Robotics, The Robotics Institute, Carnegie Mellon University.
  - 2006–2010 **BS in Electrical Engineering and Computer Science (with High Honors)**, *The University of California, Berkeley, GPA 3.88 In-Major, 3.81 Overall.*Advisors: Pieter Abbeel and Ken Goldberg

#### Publications

- Auton Robot Katharina Muelling, Arun Venkatraman, Jean-Sebastien Valois, John Downey, Jeffrey Weiss, **Shervin Javdani**, Martial Hebert, Andrew B. Schwartz, Jennifer L. Collinger, and J. Andrew (Drew) Bagnell. Autonomy Infused Teleoperation with Application to Brain Computer Interface Controlled Manipulation. In *Autonomous Robots*, 2017.
  - IROS 2016 Stefania Pellegrinelli, Henny Admoni, **Shervin Javdani**, and Siddhartha Srinivasa. Human-Robot Shared Workspace Collaboration via Hindsight Optimization. In *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2016.
  - RSS 2015 Katharina Muelling, Arun Venkatraman, Jean-Sebastien Valois, John Downey, Jeffrey Weiss, **Shervin Javdani**, Martial Hebert, Andrew B. Schwartz, Jennifer L. Collinger, and J. Andrew (Drew) Bagnell. Autonomy Infused Teleoperation with Application to BCI Manipulation. In *Robotics: Science and Systems*, 2015. **Best Systems Paper Award**
  - RSS 2015 **Shervin Javdani**, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Shared Autonomy via Hindsight Optimization. In *Robotics: Science and Systems*, 2015
  - AAAI 2015 Yuxin Chen, **Shervin Javdani**, Amin Karbasi, J. Andrew (Drew) Bagnell, Siddhartha Srinivasa, and Andreas Krause. Submodular Surrogates for Value of Information. In *AAAI Conference on Artificial Intelligence*, 2015.
- AISTATS 2014 **Shervin Javdani**, Yuxin Chen, Amin Karbasi, Andreas Krause, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Near Optimal Bayesian Active Learning for Decision Making. In *International Conference on Artificial Intelligence and Statistics*, 2014.
  - ICRA 2013 **Shervin Javdani**, Matthew Klingensmith, J. Andrew (Drew) Bagnell, Nancy Pollard, and Siddhartha Srinivasa. Efficient Touch Based Localization through Submodularity. In *IEEE International Conference on Robotics and Automation*, 2013. **Best Manipulation Paper Award Finalist**

ICRA 2011 **Shervin Javdani**, Sameep Tandon, Jie Tang, James F. O'Brien, and Pieter Abbeel. Modeling and Perception of Deformable One-Dimensional Objects. In *IEEE International Conference on Robotics and Automation*, 2013.

### ------ Workshops

- RSS 2016 **Shervin Javdani**, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Learning User Models During Shared Autonomy. In RSS Workshop on Planning for Human-Robot Interaction, 2016.
- RSS 2016 Rachel Holladay, **Shervin Javdani**, Anca Dragan, and Siddhartha Srinivasa. Active Comparison Based Learning Incorporating User Uncertainty and Noise. In RSS Workshop on Model Learning for Human-Robot Communication, 2016.
- HRI 2016 **Shervin Javdani**, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Minimizing User Cost for Shared Autonomy. In HRI Pioneers Workshop, 2016.
- RSS 2014 **Shervin Javdani**, Yuxin Chen, Amin Karbasi, Andreas Krause, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Decision Region Determination for Touch Based Localization. In RSS Workshop on Information-based Grasp and Manipulation Planning, 2014.
- ICRA 2013 **Shervin Javdani**, J. Andrew (Drew) Bagnell, and Siddhartha Srinivasa. Efficient Task Dependent Localization through Submodularity. In ICRA 2013 Mobile Manipulation Workshop on Interactive Perception, 2013.

#### Positions Held

2010-2011 **Research Staff**, *The University of California, Berkeley*, Advisors: Pieter Abbeel and Ken Goldberg.

Sensing and modelling of suture, towards autonomous suturing for medical robots.

- Summer 2009 **Software Development Intern**, *Microsoft, Inc.*, MSN Video. Improved search functionality within MSN Video using closed captioning text.
- Summer 2004 **Red Team Member**, *Carnegie Mellon University*.

  High school student intern. Performed diagnostics on navigation components on Sandstorm, a vehicle for the DARPA Grand Challenge.

#### Awards and Honors

- o HRI Pioneer, 2016
- Best Systems Paper Award, RSS 2015
- Best Manipulation Paper Award Finalist, ICRA 2013
- National Science Foundation Graduate Research Fellowship, 2011-2016
- High Honors Graduation Distinction, UC Berkeley, 2010
- o Eta Kappa Nu, Honor Society. Inducted 2007. Chapter President 2009
- o Tau Beta Pi, Honor Society. Inducted 2007.

## Talks

- 2016 **User Modeling and Decision Making for Shared Autonomy**, *Guest Lecture*, *Carnegie Mellon University*
- 2015 **Learning Policies for Shared Autonomy**, Carnegie Mellon University, PhD Proposal
- 2014 Gathering Information for Decision Making in Touch Based Localization, Carnegie Mellon University, PhD Speaking Qualifier
- 2014 **Decision Region Determination for Touch Based Localization**, RSS Workshop on Information-based Grasp and Manipulation Planning
- 2013 Efficient Touch Based Localization through Adaptive Submodularity, Guest Lecture, Carnegie Mellon University
- 2013 Efficient Touch Based Localization through Adaptive Submodularity, *TU*Darmstadt