

Stephen Brawner, PE

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Academic

Ph.D student, Computer Science. Brown University. Providence, RI

exp 2017

Advisors: Dr. Michael Littman, Dr. Stefanie Tellex

Research Focus:

- Online inverse reinforcement learning with only partial trajectories of state changes
- Choose helpful actions given a belief distribution over a set of possible tasks by optimizing schedule makespan

Sc.M., Computer Science. Brown University. Providence, RI

2014

GPA: 3.9

- Robotics, artificial intelligence, natural language processing, machine learning

B.S., Engineering. Harvey Mudd College. Claremont, CA

2007

GPA: 3.2. Deans List

- Microprocessor design, digital/analog electronics and mechanical engineering

Professional

Software Engineering Intern, Bot & Dolly, Inc. San Francisco, CA

2013

- Designed and built BD Build, a system of components designed for the Grasshopper plugin in Rhinoceros 5 to manipulate a stage of robots, single-axis tracks, tools and other forms of IO.

Software Research Intern, Open Source Robotics Foundation, Inc. Mountain View, CA

2012-2013

- Researched and built Robust, a markup language and continuous integration framework for robot testing in ROS to facilitate proof-by-reproducibility in research.

Software Engineering Intern, Willow Garage. Menlo Park, CA

2012

- Developed a SolidWorks add-in to export a complex robot design to a ROS-compatible Unified Robot Description Format (URDF) file

Consulting Engineer. Los Angeles, CA

2010-2011

- Designed and built compact device to coordinate still cameras, 3D stereoscopic sliders, grow lights and imaging lights for 3D time lapse video
- Designed and built concussion monitoring system for use in youth football

Project Engineer. eSolar, Inc. Pasadena, CA

2008-2010

- Developed heliostat cleaning system to clean 12,000 mirrors nightly with only two operators
- Designed, built and tested a semi-autonomous heliostat cleaning vehicle as key feature of system design to restore mirror cleanliness to 95% with minimal operator intervention

Patent: WO 2010093876 A2, "Heliostat Field Cleaning System", First Inventor

System Administrator Harvey Mudd College. Claremont, CA

2007-2008

- Deployed and maintained Engineering department computer systems to provide 24/7 availability

Primary Programming Languages

C++, Python, Java

Familiar Programming Languages

C#, Javascript, MATLAB

Open Source Software

- SW2URDF: bitbucket.org/brawner/sw2urdf
- Baxter H2R Packages: github.com/h2r/baxter_h2r_packages
- Collision Map Creator: bitbucket.org/brawner/collision_map_creator_plugin

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