

NICK WALKER

Ph.D. Student in Computer Science

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nickwalker.us

210.849.5866

EDUCATION

- 2018– **The University of Washington**, Seattle, WA.
- Ph.D. Computer Science
- 2014–2018 **The University of Texas**, Austin, TX.
- B.S.A. Computer Science Honors
 - Polymathic Scholar (Interdisciplinary Honors)
 - Certificate in Digital Arts & Media
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JOURNAL ARTICLES

- In review J. Thomason, A. Padmakumar, J. Sinapov, [N. Walker](#), Y. Jiang, H. Yedidsion, J. Hart, P. Stone, R. Mooney. Jointly Improving Parsing and Perception for Natural Language Commands through Human-Robot Dialog. *Journal of Artificial Intelligence Research (JAIR)*.
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CONFERENCE PROCEEDINGS

- In review J. Hart, R. Shah, S. Kirmani, [N. Walker](#), K. Baldauf, N. John, P. Stone. PRISM: Pose Registration for Integrated Semantic Mapping. In *Proc. IEEE/RSJ Int. Conf. Intelligent Robots and Systems (IROS)*. Madrid, July 2018
- [1] M. Svetlick, M. Leonetti, J. Sinapov, R. Shah, [N. Walker](#), P. Stone. Automatic Curriculum Graph Generation for Reinforcement Learning Agents. In *Proc. 31st AAAI Conf. Artificial Intelligence*. San Francisco, February 2017
- [2] E. Schroeder, [N. Walker](#), A. Danko. Wearable Ear EEG for Brain Interfacing. In *Proc. SPIE Neural Imaging Sensing*. San Francisco, February 2017
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PRESENTATIONS

- 2018 Longhorn Poster Session, UT Austin. An Interaction Perspective on Robot Learning for Domestic Service Robots. N. Walker. Poster.
- 2018 Bridging Disciplines Program Poster Session, UT Austin. Exploring New Workflows for Generative Art. N. Walker. Poster.
- 2018 Undergraduate Research Forum, UT Austin. Creating Shared Representations for Inter-robot Transfer Learning. N. Walker, R. Shah. Poster.
- 2017 Undergraduate Research Forum, UT Austin. Automatic Curriculum Graph Generation for Reinforcement Learning Agents. N. Walker, R. Shah. Poster.
- 2017 AAAI 2017, San Francisco. Automatic Curriculum Graph Generation for Reinforcement Learning Agents. N. Walker, R. Shah. Oral Spotlight, Poster.
- 2016 Fall Undergraduate Research Symposium, UT Austin. Automatic Curriculum Graph Generation for Reinforcement Learning Agents. R. Shah, N. Walker. Oral Presentation.

AWARDS

2018-19	Computer Science & Engineering Research Fellowship – <i>Allen School, UW</i>
2018	GRFP Honorable Mention – <i>National Science Foundation</i>
2018	Dean’s Honored Graduate – <i>College of Natural Sciences, UT</i>
2018	Outstanding Undergraduate Researcher Award Honorable Mention <i>Computing Research Association</i>
2017-18	Undergraduate Research Fellowship – <i>Office of Undergraduate Research, UT</i>
2017-18	Angus G. and Erna Pearson Endowed Undergraduate Scholarship – <i>Dept. of CS, UT</i>
2017	FRI Travel Grant – <i>Freshman Research Initiative, UT</i>
2017	TIDES Fellowship – <i>Texas Institute for Discovery Education in Science, UT</i>
2016-18	College Scholar - <i>College of Natural Sciences, UT</i>
2014-18	University Honors (GPA Honors) - <i>UT Austin</i>
2014-18	College of Natural Sciences Scholarship – <i>College of Natural Sciences, UT</i>

RESEARCH COMPETITIONS

2017	3rd Place, RoboCup@Home DSPL, UT Austin Villa@Home – <i>RoboCup Federation</i>
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RESEARCH AFFILIATIONS

2018–	Human-Centered Robotics Lab - University of Washington PI: Maya Cakmak
2017-18	UT Austin Villa@Home - University of Texas at Austin PIs: P. Stone, L. Sentis, S. Niekum, A. Thomaz, R. Mooney. Supervisor: Justin Hart
2015-18	Building Wide Intelligence Project - UT AI Lab PI: Peter Stone. Supervisors: Matteo Leonetti, Jivko Sinapov, Justin Hart

OUTREACH

2018	UTCS Robotics Camp – Program Assistant • Helped high school students assemble robot kit, program intelligent behaviors
2017, 2018	Explore UT – Lab Demo Assistant • Ran demos on our robots and explained BWI’s research to community members
2017	UT Introduce a Girl to Engineering Day – Women in ECE Workshop Assistant • Taught grade school girls about electricity using Play-Doh and LEDs
2016, 2017	UT Computer Science, Code Longhorn & First Bytes – Web Workshop Instructor • Taught high school students from underrepresented groups about web technologies
2016-18	Freshman Research Initiative – Peer Mentor • Helped first- and second-year students formulate their research projects

WORK EXPERIENCE

Summer 2016	USAA – Research Engineer Intern • Developed experimental brain-computer interface software and hardware • Work contributed to a SPIE conference publication
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Summer 2015 **USAA** – Research Engineer Intern

- Characterized the performance of automated speech transcription vendors
 - Developed evaluation methodology that led to a **patent application**
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SKILLS

- Experience with robotics software (**ROS, C++, Python**)
 - Experience with robotics platforms (**HSR, BWIArmBot**)
 - Experienced with iOS development (**Swift**)
 - Proficient in embedded development (**C, C++**)
 - Proficient with web technologies (**PHP, Typescript, HTML, CSS**)
 - Handy with creative tasks in Photoshop, Illustrator, InDesign, Premiere
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PERSONAL

-  [linkedin.com/in/niwalker](https://www.linkedin.com/in/niwalker)
-  github.com/nickswalker
-  [flickr.com/photos/nickwalker-us/](https://www.flickr.com/photos/nickwalker-us/)
-  nickwalker.us

Interests: Classical violin, photography, fencing (foil, USEA B2012), type design