

BLAKE WARREN WULFE

PERSONAL INFORMATION	E-mail: wulfebw@stanford.edu Github: wulfebw	Phone: (713) 569-7795
RESEARCH INTERESTS	Reinforcement Learning, Natural Language Processing, Artificial Intelligence	
EDUCATION	<u>Stanford University</u> M.S. Computer Science, Specialization in Artificial Intelligence GPA: 3.93 / 4.0	August 2015 - Present
	<u>Vanderbilt University</u> B.S Computer Science, Cum Laude & Honors Minors in Mathematics & Engineering Management GPA: 3.77 / 4.0	August 2010 - May 2014
RESEARCH EXPERIENCE	<u>Stanford Intelligent Systems Lab, Stanford University</u> Deep Reinforcement Learning of Collision Avoidance Policies <ul style="list-style-type: none">◊ Developed a deep reinforcement learning system that solves for optimal actions 20x faster than the baseline dynamic programming method.◊ Built a Boost.Python interface to an existing, high-fidelity aircraft encounter model. (C++)◊ Implemented and compared a variety of deep reinforcement learning algorithms. (Python)◊ Designed and evaluated a set of novel sampling methods to speed learning. Intelligent Agent Action Coordination <ul style="list-style-type: none">◊ Implemented a novel method for coordinating UAV actions that reduces collisions in dangerous encounters between 25%-75%.◊ Developed an aircraft encounter simulation framework for evaluating agent policies. (Julia)◊ Designed and ran experiments in order to test the effectiveness of the proposed method.◊ Published results as second author in Digital Avionics Systems Conference (DASC) 2016. <u>Human-Machine Teaming Lab, Vanderbilt University</u> 3D Map Generation of Archaeological Sites <ul style="list-style-type: none">◊ Assisted in operating, repairing, and programming autonomous UAVs.◊ Gathered images for conversion to 3D mappings during research trip to archaeological sites in Peru.	April 2016 - Present
PROFESSIONAL EXPERIENCE	<u>Accenture, Austin, TX</u> Business and Systems Integration Analyst <ul style="list-style-type: none">◊ Implemented software providing a natural language interface to users. (Java)◊ Performed client-facing requirement analysis. <u>Invivolink, Nashville, TN</u> Software Engineering Intern <ul style="list-style-type: none">◊ Implemented medical barcode parsing software. (C#)	August 2014 - August 2015 May 2012 - August 2012
TEACHING	Program Design and Data Structures, Vanderbilt University Teaching Assistant	January 2013 - May 2013
COMMUNITY SERVICE	Dance Marathon, Vanderbilt University Logistics & Finance Board Member <ul style="list-style-type: none">◊ Organized logistics for event that raised \$130,000 for Vanderbilt Children's Hospital	August 2012 - April 2013
COMPUTER & TECHNICAL SKILLS	Programming Languages: Proficient in Python, experience with Julia, C++, C, Matlab Software: Deep learning frameworks (TensorFlow, Theano)	