William Macke

+1 (314) 740 1820
wmacke@cs.utexas.edu

Education

2015-2019 **B.Sc. Computer Science**, *University of Tulsa*, Tulsa, OK.
GPA: 4.0/4.0

2019-Present **Ph.D. Computer Science (Artificial Intelligence and Machine Learning)**, *University of Texas at Austin*, Austin, Tx.
GPA: 4.0

Research Interests

Multi-Agent Systems, Ad Hoc Teamwork, Machine/Deep Learning, Online Matching

Research Experience

Publications

Nathaniel Beckemeyer, **William Macke**, and Sandip Sen, Stable Configurations with (Meta)Punishing Agents. MABS 2017

Jon Bolin, Chad Crawford, **William Macke**, Sam Beckman and Sandip Sen, Gesture-Based Control of Autonomous UAVs, AAMAS 2017

Zhuoshu Li, Kelsey Lieberman*, **William Macke***, Sofia Carrillo, Chien-Ju Ho, Jason Wellen, and Sanmay Das. Incorporating compatible pairs in kidney exchange: A dynamic weighted matching model. In Proceedings of the 2019 ACM Conference on Economics and Computation , EC '19, pages 349–367, New York, NY, USA, 2019. ACM
* Equal Contribution

Reuth Mirsky, **William Macke**, Andy Wang, Harel Yedidsion, and Peter Stone. A penny for your thoughts: The value of communication in ad hoc teamwork. IJCAI 2020.

Garret Bingham*, **William Macke***, Risto Miikkulainen. Learning with Evolved Activation Functions, GECCO 2020
* Equal Contribution

Research Assistantships

Tulsa Undergraduate Research Challenge (Summer 2016/2017)

NSF Research for Undergraduates Big Data Analytics Site at Washington University in Saint Louis (Summer 2018)

Ongoing

Communication in Ad Hoc Teamwork, Multiagent Reinforcement Learning for Traffic Control

Leadership

ICPC

Team Leader of Intercollegiate Programming Competition (ICPC) club for the Association of Computing Machinery (ACM) at the University of Tulsa.

Coding Projects

KMeans

https://github.com/williammacke/KMeans

Template Flow	https://github.com/williammacke/TemplateFlow

Skills and Technologies

Languages	C/C++, Java, Python, C#, LaTeX, Bash, R, Haskell
Libraries	NumPy, TensorFlow, OpenCV, Eigen
Operating Systems	GNU/Linux, Windows

Honors and Awards

Summa Cum Laude	Achieved 4.0 GPA every semester at the University of Tulsa
MAA	Received Second Place Overall in 2016 MAA Oklahoma-Arkansas Regional
Presidential Scholarship	Merit-based scholarship awarded by the University of Tulsa covering full tuition and living expenses
MABS	Selected as most visionary paper in the 2017 workshop for Multi-Agent Based Simulation at the conference for Autonomous Agents and Multi-Agent Systems
NSF Symposium	Selected to present research from NSF REU site at Washington University in Saint Louis for the NSF REU Symposium