Ryan Blake Jackson

PhD Candidate, MIRROR Lab, Colorado School of Mines

CV updated November 2018

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EDUCATION

2018 – 2021 **Ph.D. Computer Science (expected)**
Colorado School of Mines
Adviser: Dr. Tom Williams
GPA: 4.0

2016 – 2018 **M.S. Computer Science**
Colorado School of Mines
Adviser: Dr. Tracy Camp
GPA: 4.0

2012 – 2016 **B.A. Computer Science (Discrete math minor)**
Colorado College
Department of Mathematics and Computer Science
GPA: 3.96

PUBLICATIONS

Ryan Blake Jackson, Ruchen Wen, and Tom Williams (2019 **under review**). Tact in Noncompliance: The Need for Pragmatically Apt Responses to Unethical Commands. *AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES).*

Ryan Blake Jackson and Tom Williams (2019 **under review**). Language-Capable Robots may Inadvertently Weaken Human Moral Norms. *14th Annual ACM/IEEE International Conference on Human Robot Interaction (HRI).*

Ryan Blake Jackson and Tom Williams (2018). Robot: Asker of Questions and Changer of Norms? *International Conference on Robot Ethics and Standards (ICRES).*

Tom Williams, **Ryan Blake Jackson**, and Jane Lockshin (2018). A Bayesian Analysis of Moral Norm Malleability during Clarification Dialogues. *Annual Meeting of the Cognitive Science Society (COGSCI).*

Ryan Blake Jackson, and Tracy Camp (2018). Amazon Echo Security: Machine Learning to Classify Encrypted Traffic. *27th International Conference on Computer Communication and Networks (ICCCN).*

Wendy Fisher, **Ryan Blake Jackson**, Tracy Camp, and Valeria Krzhizhanovskaya (2018). Anomaly Detection in Earth Dam and Levee Passive Seismic Data Using Multivariate Gaussian. *16th IEEE International Conference on Machine Learning and Applications (ICMLA).*

ABSTRACTS AND PRESENTATIONS

Ryan Blake Jackson and Tom Williams (2018). Challenges in Responding to Malicious Robot-Directed Commands. *RSS Workshop on Adversarial Robotics.*

Qin Zhu, Tom Williams, and **Ryan Blake Jackson** (2018). Blame-Laden Moral Rebukes and the Morally Competent Robot: A Confucian Ethical Perspective. *Brain-Based and Artificial Intelligence.*

AWARDS

2016 **Florian Cajori Award**
For outstanding mathematical prowess
Colorado College

2016 **Graduated Magna Cum Laude**
Colorado College

2016 **Departmental Distinction in Computer Science**
Colorado College

2012 **Volunteerism/Community Service Scholarship**
Colorado Council on High School/College Relations

RESEARCH EXPERIENCE

2017 – 2018
Colorado School of Mines
Master's Thesis Research

Investigated machine learning to extract ostensibly private information from data moving between an Echo device and Amazon's servers, despite encryption. Explored determining what type of user request is being answered by the Echo and who, of a finite set of people, is speaking to the Echo.

2016 – 2018
Colorado School of Mines
Research Assistant

Contributed to research on various departmental grant projects and publications.

SUMMER 2017
Ricoh Production Print Solutions LLC
Machine Learning Intern

Created a machine learning system to predict production print performance from document traits. System used by sales team to respond to customer inquiries.

2015 – 2016
Colorado College
Senior Capstone Research Project

Performed detailed statistical analysis of multithreading context switch data from various operating systems. Presented and defended analysis to suggest kernel optimizations.

SUMMER 2015
University of Illinois at Urbana-Champaign, Parallel Computing Institute
Undergraduate Researcher

Researched machine learning for astrophysics to determine relative velocities of galaxies and properties of dark energy. Presented technical poster summarizing research.