

## **Titles of Projects for April 2019**

**(With Supervisors in Parenthesis)**

A Preliminary Study on the Feasibility of a 3-link Underactuated Robot  
Austin Carthy, John Copping, Samuel Guay (A. Lewis)

Model Predictive Control for Supply Chain Optimization  
Jason Benchetrit, Ted Bursley, Coby Davis, Julian Gailiunas (B. Gharesifard)

Designing an Optimizing Algorithm for Algorithmic Trading Through Reinforcement Learning  
Max Gillham, Eric Grewal, Bryony Schonewille, Yuankang Zhang (S. Yuksel)

Information Bottleneck Approach to Geometric Clustering  
Jesse Jia, Braeden Ng, Cole Thierrin, Matt Whittle (F. Alajaji)

Motion Planning in Dynamic Environments for Holonomic Vehicles  
Adam Boljkovac, Patrick Chin, Steven Lee, Jordana Sherman (B. Gharesifard)

A Simple Robot that Hops and Flips  
Kristen Dmytryshyn, Ben Maxwell, Claudia Sorgini, Connor Wilkinson (A. Lewis)

Motion Planning in Stochastic Environments  
Chris Caromicoli, Lachlan Devir, Andrew Downie, Alex Taylor (B. Gharesifard)

Brain-Computer Interface Design for Prosthetic Arm Control  
Becca Bonham-Carter, Michaila Landon-Brace, Noah Rottman (S. Yuksel)

Suppressing the Spread of Disinformation in Social Networks  
Becky Brace, Tegan Dietsch, Connor Killackey, Shini Ko (F. Alajaji)

Underwater Locomotion of n-Link Bodyby use of Stationary Vortices  
Liam Barden, Fernando Camacho Cadena, Hugh Corley, Tess O'Hara (A. Lewis)

Navigation and Guidance for Marine Vessels Using Model Predictive Control  
Luke Chau, Benji Christie, Thomas Huckell, Simon Kersten (B. Gharesifard)

Targeted Advertising: Optimal Clustering Through Empirical Learning  
Riley Becker, Michael Mackenzie, Emma Miloff, Helen Steneker (S. Yuksel)

Text Classification via the Deterministic Information Bottleneck Technique  
Jack Guebert, Wesley Routley, Brant Vanderveen, Elise Weissenberger (F. Alajaji)

A Simple Robot That Hops and Flips  
Alexander Amos, Etienne Berube, Daniel Krsikapa, Hisham Mansour (A. Lewis)

Underwater Demining Operations Optimization and Design of Networked Control Systems  
Erin Battle, Jonah Eisen, Caelum Kamps, Jessica Kelly (S. Yuksel)

Initial Condition Optimization for the Network Polya Contagion Model with an Application to Protect Against Weaponized Smallpox  
Joey Blumenstein, Thomas Morrish, Benjamin Simons (F. Alajaji)