

Titles of Projects for April 2020

(With Supervisors in Parenthesis)

Using Vortices to Prove Propulsion of Robotic Fish

Cyrus Matheson, Daniel MacGregor, Jonathan Keeler, Jordan Allen, Polina Oxendler (A.Lewis)

Designing Q-Learning Models to Optimize Portfolio Allocation in Foreign Exchange Markets

Clarie Philips, Dempster Schnekenburger, Matt Bourque, Nick Dal Farra (S.Yuksel)

Tracking Stem Cells in an Image Sequence

Declan Colwell, Imogen den Otter Moore, Laura Di Luch, Peter Kyle, Stefan Robb (A.Mansouri)

Combatting the Spread of Misinformation in a Social Media Network via Polya Contagion Model

Chelsea Pham, Jessica Landon, Kate Norris, Peter Wright, Theo Bresolin (F.Alajaji)

Discrete-Time Controlled Closure of the Aortic Valve Using Blood Vortices

Hollis Holmes, Ian Hogeboom-Burr, Jack Sivec, James Houston(A.Lewis)

Reinforcement Learning for Electrical Grid Optimization

Brielle Thorsen, Duncan Mays, Max-Amatsuji-Berry, Tyler Macintyre (S.Yuksel)

Region Tracking in an Image Sequence for Automated Film Editing

Andrew Sheldon, Eric Backman, Glen Creaser, Jamie Linsdell, Luke Staniscia (A.Mansouri)

Optimization of Vaccine Deployment in a Finite Memory Network Polya Urn Scheme

Chelsey Kurylo, Luke Mazzei, Molly White, Natalie Ranta, Sebastien Gravel (F.Alajaji)

Pose Control of an Under-Actuated Prosthetic Limb

Chris Mar, Christopher Wilson, Jonathan Phung, Linda Sobaszek, Sarah Babbit (A.Lewis)

Design of an Interplanetary Networked Communication System and Rover Path Optimization Algorithm

Chelsea Wallace, Justin Yan, Tarun Anand, Tyler Murphy (S.Yuksel)

Facial Recognition for Retail Payment Processing

Isabel Hazan, Jack Ellis, Levi Stringer, Sandra Chan, Violette Giry (A. Mansouri)

Generative Adversarial Networks Applied to Unpaired Image-to-Image Translation

Evan Snider, Helena Basaric, Jacob Beallor, Jason Kronick, Maxwell Berkowitz (F.Alajaji)

Sit-to-Stand Exoskeleton-Preventive Care for Muscular Dystrophy Patients

Cailey Shewchuk, James Hollingworth, Jon Bryan, Nicholas Byrne (A.Lewis)

Optimizing Brain Controlled Prosthetic Arm Motion

Annie King, David Hodge, David Nunez, Eric Lefaive, Mukund Mauji (S. Yuksel)

Monitoring Class Attendance with Facial Recognition Using Optimal Kernel Principal Component Analysis

Gabriel Bettio, Isabella Wright, Jake Stubbs, Joey Tepperman, Noah Ifergan (A.Mansouri)

Seeded Text Generation for Computer to Human Communication

Adam Gronowski, Cooper Midroni, Hatem Aldawaghreh, Mike Lynch, Robbie Moore (F.Alajaji)