

During 2003, The Draper Fellow Program consisted of approximately 60 students from MIT and several other universities. Abstracts of theses completed this year are available on the Laboratory's web site at www.draper.com. The list of completed theses follows:

- Allred, C.; Supervisors: Borenstein, J.; Hobbs, L.
Effect of Radiation on Silicon and Borosilicate Glass
Doctor of Philosophy Thesis, MIT, September 2003
- Brown, E.; Supervisors: Kaiser, K.; Cesnik, C.
Integrated Strain Actuation in Aircraft with Highly Flexible Composite Wings
Doctor of Science Thesis, MIT, June 2003
- Cholankeri, E.; Supervisors: Hall, W.; Clarke, J.-P.
Evaluation of an Auction Mechanism for Allocating Airport Arrival Slots
Master of Science Thesis, MIT, May 2003
- Clarke, K.; Supervisors: Rao, A.; How, J.
Performance Optimization Study of a Common Aero Vehicle Using a Legendre Pseudospectral Method
Master of Science Thesis, MIT, May 2003
- Craig, M.; Supervisors: Turkovich, J.; Pena-Mora, F.
A Design for Dynamic Self-Organization in Autonomous Distributed Operations
Master of Science Thesis, MIT, May 2003
- Dasgupta, D.; Supervisors: Cleary, M.; Davis, R.
Facilitating User Understanding of Optimizations: A Case Study of the Channel Route Network Planning
Master of Science Thesis, MIT, May 2003
- DiCarlo, J.; Supervisors: Barton, G.; Schmidt, G.
Aerocapture Guidance Methods for High Energy Trajectories
Master of Science Thesis, MIT, May 2003
- Guerra, C.; Supervisors: Page, L.; Deyst, J.
Planning and Scheduling Proximity Operations for Autonomous Orbital Rendezvous
Master of Science Thesis, MIT, June 2003
- Ha, V.; Supervisors: Kochaki, J.; Garland, S.; Lynch, N.
Verification of an Attitude Control System
Bachelor and Master of Science Thesis, MIT, May 2003
- Huang, E.; Supervisors: Houston, K.; Teller, S.
A Semi-Autonomous Vision-Based Navigation System for a Mobile Robotic Vehicle
Master of Science Thesis, MIT, May 2003
- Huntington, G.; Supervisors: Geller, D.; Battin, R.
Trajectory Design and Analysis of a Mars-Orbit Rendezvous Flight Experiment
Master of Science Thesis, MIT, September 2003
- Lee, A.; Supervisors: Bedrossian, N.; Spanos, P.; Jang, J.; Meade, A., Jr.; Nagarajaiah, S.
Robust Momentum Manager Controller for Space Station Applications
Master of Science Thesis, Rice University, May 2003
- Long, S.; Supervisors: Staugler, A.; Kachmar, P.; Schmidt, G.
Simulation Methods for the Development of Modular Strategic Guidance Systems
Master of Science Thesis, MIT, June 2003
- Lowry, N.; Supervisors: Hall, R.; Ghorbel, F.; Clark, J., Jr.; Miele, A.
A Three-Pulse Algorithm for Minimum-Fuel Rotational Maneuvers
Master of Science Thesis, Rice University, August 2003
- McClung, R.; Supervisors: Ricard, M.; Kilmer, M.
Optimization with Imperfect State Information
Master of Science Thesis, Tufts University, April 2003
- Mierisch, A.; Supervisors: Kremer, W.; Kaelbling, L.
Situational Awareness for Navy Unmanned Undersea Vehicle
Master of Science Thesis, MIT, June 2003
- Mirczak, J.; Supervisors: Socha, M.; Martinez-Sanchez, M.
Milli-Newton Thrust Stand for Electric Propulsion
Master of Science Thesis, MIT, May 2003
- Narendran, K.; Supervisors: Anderson, J.; Kaelbling, L.
Autonomous Stair Climbing
Master of Science Thesis, MIT, January 2003
- Obenchain, M.; Supervisors: McFarland, W., Jr.; Van Schoor, M.
Shape Memory Alloy Induced Wing Warping for a Small Unmanned Aerial Vehicle
Master of Science Thesis, MIT, May 2003
- Pietz, J.; Supervisors: Bedrossian, N.; Symes, W.; Zhang, Y.
Pseudospectral Collocation Methods for the Direct Transcription of Optimal Control Problems
Master of Arts Thesis, Rice University, April 2003
- Prince, R.; Supervisors: Williams, J.; Voldman, J.
A Disposable, Self-Administered Electrolyte Test
Master of Engineering Thesis, MIT, February 2003
- Ranger, E.; Supervisors: Houston, K.; Knight, T., Jr.
Demonstration System for a Low-Power Seismic Detector and Classifier
Master of Science Thesis, MIT, June 2003
- Sattler, N.; Supervisors: Appleby, B.; Deyst, J.
A Sensor-Based Obstacle Avoidance System for an Under-Canopy Autonomous Aircraft
Master of Science Thesis, MIT, May 2003
- Stanton, S.; Supervisors: D'Souza, C.; Proulx, R.; Schmidt, G.
Optimal Orbital Transfer Using a Legendre Pseudospectral Method
Master of Science Thesis, MIT, May 2003
- Taylor, C.; Supervisors: Rao, A.; How, J.
Optimization Study of a Transatlantic Abort for the U.S. Space Shuttle Using a Pseudospectral Legendre Method
Master of Science Thesis, MIT, September 2003
- Tompkins, M.; Supervisors: Turkovich, J.; Dahleh, M.
Optimization Techniques for Task Allocation and Scheduling in Distributed Multi-Agent Operations
Master of Engineering Thesis, MIT, May 2003
- Vogel, M.; Supervisors: Ward, P.; Perrott, M.
Low Phase-Noise VCO Design
Master of Engineering Thesis, MIT, May 2003
- Yang, T.; Supervisors: Persson, B.; How, J.
Optimal Thruster Selection with Robust Estimation for Formation Flying Applications
Master of Science Thesis, MIT, May 2003
- Young, J., III; Supervisors: Carter, D.; Draim, J.; Cefola, P.
Coverage Optimization Using a Single Satellite Orbital Figure-of-Merit
Master of Science Thesis, MIT, June 2003
- Zarybnisky, E.; Supervisors: Kowitz, S.; Barnhart, C.; Kaelbling, L.
Allocation of Air Resources Against an Intelligent Adversary
Master of Science Thesis, MIT, May 2003