CHRISTOPHER P. SILVIA

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Present Address
608 East Buffalo St.
Ithaca, NY 14850

Permanant Address
7801 Leesburg Drive
Bethesda MD, 20817

Education

Cornell University, Ithaca, NY
Bachelor of Arts, Physics with concentration in Applied Mathematics
Bachelor of Arts, Mathematics, with concentration in Mathematical Physics
Expected Graduation Date: May 2017
GPA: 3.64/4.0

Relevant Coursework

Undergraduate Courses	**Graduate Courses**
Fluid Dynamics	Computational Fluid Dynamics
Robotic Manipulation	Mobile Sensor Planning
Computational Physics	Multivariable Control Theory

Relevant Experience

Research Team Member   Professor Alexander Vladimirsky   Summer 2016
Department of Mathematics
Cornell University

- Wrote path-planning algorithm to improve ambulance response times.
- Implemented Algorithm in Python using the NetworkX graph library
- Implemented a custom Heap data structure to meet algorithm requirements

Intern   Lockheed Martin Corporation   Summer 2013
Gaithersburg, MD

- Developed DevOps System with Ruby/Chef to provision OpenStack Clusters
- Automated Systems Administrations Tasks for Running Servers

Relevant Projects

- Implemented a Dormand-Prince dynamic-step integrator in Python
- Analyzed tradeoffs between fuel efficiency and thrust for Lunar Landers
- Implemented a hand velocity controller for a Rethink Robotics Baxter robot

Skills

- Creating and analyzing numerical models
- Writing robot control systems with Linux, Robot Operating System (ROS)
- CAD design with Autodesk Inventor
- Collaborating on technical teams, writing papers with LaTeX
- Version Control with Git

Programming Languages

- Proficient in Python, as well as its numpy and scipy libraries
- Experienced with C++, Matlab, Octave, and Julia