Nicholas A. Farino
E: naf36@cornell.edu • M: 631-456-6063 • Northport, NY 11768

Systems Engineering & Data Science

Meticulous **Systems Engineer** who employs inventive algorithms and multi-disciplinary thinking to solve some of the most complex engineering problems. Possesses technical and social skills necessary to thrive in fast-paced team settings. Applies model-based systems engineering tools to organize product requirements and exceed deliverable expectations. **Core competencies include:**

Modeling & Simulation • Systems Engineering • Product Development • Algorithm Analysis
Software Engineering • Machine Learning • Optimization • Data Science • Team Management

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Academic Experience

Cornell University's Violet Nanosatellite Team • 2014 – Present
Violet is a nanosatellite, set to launch May 2016, that utilizes eight Control Moment Gyroscopes to experimentally validate high-agility attitude control and CMG steering laws.

Simulation/Multi-disciplinary Engineer
Constructs program in Matlab/Simulink that simulates space environment and spacecraft dynamics in order to assess ability of Violet's flight computer to receive commands and control satellite attitude. Programs flight computer used to control satellite attitude in C.

- Generated and prepared over 20 failure scenarios for simulation to test
- Implemented extended kalman filter and sensor noise reduction into flight computer

Cornell University's AguaClara Research Team • June – December 2014
AguaClara is a multi-disciplinary program that designs sustainable water treatment systems committed to long-term environmental, social, and economic sustainability.

Backwash Filter Systems Engineer
Organized product requirements and deadlines for team of six in order to design filter that did not clog when filtering muddy water conditions. Conducted experiments and analyzed data in order to find conditions such that the design would not clog.

- Used self-written data analysis algorithm to identify properties and trends in large experimental data sets

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Education

Cornell University, College of Engineering, Ithaca, NY
Master of Engineering in Systems Engineering expected December 2015 • GPA: 3.7
Bachelor of Science, *cum laude*, Civil Engineering, May 2015 • GPA: 3.51

Florida Atlantic University, College of Engineering, Boca Raton, FL
Associate of Arts May 2013 • GPA: 3.92
Minor in Mathematics May 2013