NASA-KSC/EX-E High Education
Internship Project & Abstract Form

Please provide this information requested to: rose.m.austin@nasa.gov
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Full name (First MI Last):	Scott J. Dito
Academic Institution:	College of San Mateo
City, State, Zip Code:	San Mateo, CA, 94402
Funding Source:	KSC FO
Name of Branch or Division:	NE-C4 Hardware Engineering Branch
Desk Location (Bldg Name, Cube #):	LCC 4P02M
Degree of Study: (i.e. MBA, BS in Electrical Engineering, etc) Major & Minors	BS in Mechanical Engineering
Expected Graduation (Month/ Year):	05/2016
Project Title:	System Administration Support/SWORDS G2

Project / Abstract Summary: (Approximately 300 words)

One complete paragraph in itself (not an introduction). It should indicate subjects while also stating objectives of the project. Newly observed facts and conclusions of project discussed must be stated in summary form. Readers should be able to understand your project and what you completed in your abstract.

The Soldier-Warfighter Operationally Responsive Deployer for Space (SWORDS) rocket is a dedicated small satellite launcher that will minimize danger and complexity in order to allow soldiers in the field to put payloads of up to 25kg into orbit from the field. The SWORDS/G2 project is the development of a model, simulation, and ultimately a working application that will control and monitor the cryogenic fluid delivery to the SWORDS rocket for testing purposes. To accomplish this, the project is using the programming language/environment Gensym G2. The environment is an all-inclusive application that allows development, testing, modeling, and finally operation of the unique application through graphical and programmatic methods. In addition, observation of the current cryogenic fluid delivery system in the Kennedy Space Center Cryo Lab has allowed me to gain valuable experience of fluid systems and propellant delivery that is valuable to our team when developing and modeling our own system. The ultimate goal of having a test-ready application to show to the heads of the project, and demonstrating G2's capabilities, by late 2014 will require hard work and intense study and understanding of not only the programming aspect but also the physical phenomena we want to model, observe, and control.

If you are writing a paper for school or specific internship program, provide the following:

Paper Title:	**System Administration Support G2**
Mentor Name:	**Michael McDonough**
Mailcode:	NE-C4

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