School Address:
410 Memorial Drive
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Ceili A. Burdhimo

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Home Address:
1553 Somers Point Rd
EHT, NJ 08234

Education:

Massachusetts Institute of Technology – Cambridge, MA 2016
Candidate for B.S. in Aerospace Engineering
Relevant Coursework: Calculus, Physics-Mechanics, Seminar on Systems Thinking

Egg Harbor Township High School – Egg Harbor Township, NJ 2012
Valedictorian in class of 632 Students
GPA: 108.9 (weighted, out of 100), SAT: 2290

Experience:

Undergraduate Research Opportunity for the Space Systems Lab at MIT – Cambridge, MA Fall 2012
SPHERES SWARM Project
- Reactivating and upgrading hardware and software to be added to the SPHERES on ISS for new docking maneuvers

Internships at NASA Goddard Space Flight Center – Greenbelt, MD
Engineering Testing Unit Development June-August 2012
- Paid internship under Dr. Keith Gendreau, the PI for the Neutron star Interior Composition ExploreR (NICER)
  - Phase A ISS mission which will study neutron stars with 56 co-aligned X-ray concentrators and detectors
- Developed a mock-up attitude control system (ACS) and tracking program
  - Modeled the mission's ACS, ISS vibration, and demonstrated tracking abilities within mission requirements
- Assembled and tested x-ray concentrators, created an optic holder, and designed an optic alignment mechanism
  - Characterized the effectiveness of the first assembled optics by determining the point-spread function of the optic engineering testing units; worked in vacuum sealed environments
- Created and programmed a device to make precise measurements for optic manufacturing
- Organized the NICER Mission Wiki and assisted the NICER proposal team with graphics and write-ups
- Gained experience with Python coding, machining and manufacturing, hands-on lab work, engineering design
- Led a small group of HS interns on their own project involving NICER

Proposal Team Assistant June-August 2011
- Paid internship sponsored by the NASA INSPIRE program under Ezinne Uzo-Okoro for the Cloud Aerosol Interaction Mission in 3D (CLAIM-3D)
- Compiled flight history data for an instrument to be flown on the proposed Earth observing satellite, interfaced with engineers and scientists, created tables and wrote descriptions of information to be used in the proposal, designed graphical Fold Outs and a Mission Fact Sheet

Leadership and Activities:

MIT:
Students for the Exploration and Development of Space – Event Coordinator
Rocket Team – Assisting with the NASA University Space Launch Initiative Project; developing a level 1 rocket
Society of Women Engineers – Keys to Empowering Youth Outreach Program Freshman Representative and Chair
MIT Outing Club

High School:
Atlantic Youth Orchestra, HS String/Pit Orchestra - Violin Section leader
- Volunteered to play concerts around the community

Interact Club – Historian, Lead Chairperson
- Created, managed, ran a photo booth for the 21 Down Christmas Party, completed 60+ hours in service projects

National Honor Society - Vice President
- Coordinated the tutoring program and tutored peers in mathematics

NASA INSPIRE Program
- Participated in activities, live chats, and group projects, selected to attend 3 Summer STEM Experiences

NASA JSC Women in STEM HS Aerospace Scholar
- Completed 5 units about space exploration designed missions to the Moon and Mars, participated in discussions

Varsity Soccer and Club Soccer –Team Captain

Skills and Awards:

Computer: Python, JAVA, Microsoft Office **Languages:** English, Spanish – Conversational
Certificate of Merit from the Society of Women Engineers 2011
AP Scholar with Distinction 2012