Home Address 317 Garnsey Road Pittsford, NY 14534 Phone: 585-747-3380 Email: jander19@villanova.edu

Education:

- Villanova University, 2009-2015
 - MS in Mechanical Engineering; Expected Completion Date: Spring 2015
 - o BS in Mechanical Engineering, Minor in Mechatronics
 - Graduated Magna Cum Laude
 - o Overall GPA: 3.75
 - Relevant coursework includes Dynamic Systems, Thermodynamics, Heat Transfer, Fluid Mechanics, Robotics,
 Electric Machines, Chemistry, Physics, as well as Introductions to Electrical and Computer Engineering
- London School of Economics, Summer 2011
 - Studies in Macroeconomics and Anthropology
- McQuaid Jesuit High School

Work History:

- <u>Villanova University</u>, CENDAC Research, Summer 2012 Present
 - Design and building of a autonomous boat under Villanova Professors Dr. Clayton and Dr. Ashrafiuon
 - Programming of a system where obstacles are located using a webcam and motor encoders are then used to control the boat and avoid the obstacle
 - Control of robot performed by a single board computer running the Linux Ubuntu Operating System

Major Projects:

- <u>Senior Design Project</u>: UXO (Unexploded Ordinances) Robot
 - Design and build of a robot with a team costing under \$15000 to help dispose of UXOs in third world countries
 - Partner with the Golden West Foundation- Research leaders in disposing of explosives in Cambodia and other third world countries
 - Engineering process performed over final year of school, including a trip to Cambodia to present design to Golden West
- Beetlebot Competition: Battle Robot Competition
 - Design and build of a robot with a team which would battle against those build by other students

Affiliations:

- Boy Scouts Achieved the Rank of Eagle
- Member of the National Society of Collegiate Scholars
- Member of the Villanova Rugby Club
- Member of the Villanova Branch of Invisible Children
- Commitment to service at Villanova, including volunteering for Special Olympics and Habitat for Humanity

Skills:

- Experience coding MATLAB, C, and C++ languages
- Familiarity with microcontrollers, specifically Arduino UNO boards
- Experience using the programs LABVIEW, Mathcad, PSpice, and the CAD program Solidworks
- Proficient using Microsoft Excel, Word, and Powerpoint