

Jenniffer Marie Estrada

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Objective: A summer 2009 internship or co-op utilizing my technical and problem solving skills within electrical engineering.

Technical Experience:

- Nano/Micro-Scale Systems Engineering**, Potsdam, NY Spring 2009
 - Design and fabrication of MEMS and NEMS in Cornell's Nano-scale Fabrication facility.
- Dynamical Systems Project**, Potsdam, NY Spring 2009
 - Analysis and modeling of thermo-electro-mechanical systems using Simulink and Matlab.
- Advanced Digital Design Team Projects**, Potsdam, NY Fall 2008
 - Designed, tested and implemented various hardware programming projects using VHDL and DE1 Board.
- Signal Processing Projects**, Potsdam, NY 2008-2009
 - Designed and created a unique song using Matlab and signal processing techniques.
 - Designed a filter for noise corrupted Electrocardiograph (ECG) data.
- National Student Leadership Conference Robotics Competition**, University of Maryland, MD Summer 2005
 - Built, tested and operated submersible robot in NavSea facilities.
- Physics Team Design**, Potsdam, NY August 2006
 - Tested and mathematically modeled physical forces acting upon a model car on arbitrary tracks.
 - Effective use of wind tunnels and vacuums to collect and interpret meaningful data.
- Zrinity, Inc., Clarkson University Library, New York University, Programmer and Graphic Designer**, NY 2007-2008
 - Optimized website traffic using marketing strategies and web engine optimization techniques, revamped library webpage and other technical aspects, created and improved small business sites and logo work.

Research:

- Clarkson Mathematics Department, Student Researcher**, Potsdam, NY August 2008
 - Implementation of digital image processing, video segmentation and computer vision techniques using Matlab.
 - Research sensory compression methods for improving quality of images.
- Clarkson Psychology Department, Psychological Experiment Conductor**, Potsdam, NY Fall 2008
 - NIH Protection of Human Research Participants Certification and IRB approval for testing on humans.
 - Written APA format research paper, conducted experiment, encoded and analyzed data.
- Clarkson Psychology Department, Student Assistant Researcher**, Potsdam, NY 2006-2007
 - Operated Electromyography (EMG) on human subjects and collected data.

Leadership:

- FIRST Robotics Team**, Potsdam, NY August 2008
 - Mentor local High School Students and assist in building robot for competition.
- Clarkson School of Engineering, Undergraduate Teaching Assistant**, Potsdam, NY January 2009
 - Aid professor conduct class, run a lab section, manage and assess 30+ student use of Matlab.
- Army ROTC Cadet, JROTC Cadet 2nd Lieutenant, Civil Air Patrol Cadet, Venturing Vice-President** 2005-2007
 - Managed groups of 20+ and led group activities and meetings.

Academic Experience:

Clarkson University, Potsdam, New York

Bachelor of Science, Electrical Engineering, 2010
Mathematics Minor

The Clarkson School, Potsdam, New York

Skills and Certifications:

Matlab, VHDL, PSPICE, LabVIEW, Simulink, C++, Java, SystemC, Verilog, AutoCAD, Clean Room, Fabrication and Machining Experience, Web Design, Microsoft Office Word/Excel/Powerpoint, UNIX/Mac & Microsoft Operating Systems, FCC Certified Technician Ham Radio Operator, FAA Medical Certificate Third Class and Student Pilot Certificate, Spanish (Fluent)

Professional Associations and Memberships:

Institute of Electrical and Electronics Engineers, Society of Hispanic Professional Engineers, Society of Women Engineers, American Institute of Aeronautics and Astronautics, CSTEP Scholar, K2CC Amateur Radio, Open Source Institute, Women's Hockey Club

Honors and Awards:

President's Award for Educational Achievement, Civil Air Patrol Air Force Commander's Commendation, American Legion Gold Military Award, 166th Area Support Group Commander's Coin of Excellence, Gen. Hap Arnold Achievement, Wright Brothers Achievement, Gen. J. F. Curry Achievement, National Physical Fitness Award, Venture High Adventure Badge
