Nathaniel Feldman

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Objective
Seeking full time employment to apply knowledge and grow in a challenging, versatile environment

Education
Boston University, *College of Engineering*   Boston, MA | Fall 2014 - Present
- Bachelor of Science in Mechanical Engineering, Minor in Computer Engineering – Expected May 2018
- Cumulative GPA 3.73/4.00, Dean's List

Université Joseph Fourier – *Semester Abroad*   Grenoble, France | Spring 2016

Professional Experience
Methods Machine Tools, *Controls Engineer Co-op*   Sudbury, MA | May – Aug 2017
Lead the technical development of custom "scan to CAD" system in collaboration with Penn State University
- Integrated laser profilometer within spindle of 5 axis machine tool
- Extensive product research and vendor communication on limitations
- Wrote C++ application to mediate communication between scanner controller and FANUC iB control to produce vector corrected point cloud models of part in chuck
- Culminated in multiple day State College visit for system set up and training

Point of contact for industry automation cell electrical system assembly
- Cell fabricated neutral rods for GE, consisting of pneumatic barfeed, shear, transfer station, and machine tool with custom work holding
- Material preparation, sensor installation, electrical cabinet wiring, system networking
- Elevated concerns and roadblocks to engineers and collaborated on resolution
- 4 new cells completed in six weeks ($1.1 million job including original cell)

Torcon, *Assistant Building Information Modeling Engineer*   Red Bank, NJ | Jun – Aug 2016
Worked alongside five engineers to plan and facilitate the renovation or new construction of pharmaceutical labs, university fitness centers, and dormitories
- Utilized a Faro laser scanner and Autodesk's ReCap and Revit to capture building interiors, register scans, and model existing mechanical, electrical, and plumbing systems
- Constructed 3D architectural models from plan drawings and conducted clash tests between subtrade models in Navisworks to isolate conflicts

Relevant Skills
CAD (SOLDIWORKS, Creo, AutoCAD, Revit), **Programming** (C++, C#, Python, MATLAB), **Computer** (Office Suite, LaTeX), **Shop** (Soldering, Woodworking, Machining, GibbsCAM), **Language** (Conversational French)

Leadership/Extracurricular Activities
Eagle Scout, *Boy Scouts of America*   Old Bridge, NJ | 2005 – 2013
Managed 30 scouts and adults to install split rail fence and construct custom benches
- Designed layout of fence, benches, and trees for optimal function and beautification

Mechanical Engineer, *Boston University Rocket Propulsion Group*   Boston, MA | 2014 – 2016
Field testing of experimental hybrid engines

Training Member, *Liquid Fun Improv Comedy*   Boston, MA | 2014 – 2015

Projects
Bicycle Powered Generator, *Product Design Course Project*   Fall 2016
This prototype was constructed for community preparedness situations as a source of emergency power in a disaster.
- Adapted bike trainer to spin DC Motor which powered a battery charger connected to a lead acid battery
- Capable of switching to 120 V power output with additional 5V USB ports
- Average person capable of producing minimum 100 Watt-hours per day

Endurance Limit Tester, *Engineering Design Course Project*   Fall 2015
This prototype was constructed in response to a challenge by Gillette to produce a device capable of testing the mechanical properties of additively manufactured materials.
- Utilized Arduino controlled photodiode, flex sensor, and modified jigsaw to cyclically bend metal samples and detect point of fatigue