

# Brett Passemato

857-312-9193 || [passemato@yahoo.com](mailto:passemato@yahoo.com) || 60 Calumet St #2, Boston, MA 02120 || [www.linkedin.com/in/brettpassemato/](http://www.linkedin.com/in/brettpassemato/)

*Senior-year engineering student with professional engineering experience in product development of consumer goods.*

## PROFESSIONAL EXPERIENCE

### **Euro-Pro Operating LLC**

#### **Engineering Intern**

September 2014—January 2015

Newton, MA

- Worked as part of the Shark engineering steam team to bring the next-generation steam mop to market
- Designed, prototyped, and tested attachments to be used in above-floor steam-cleaning applications
- Performed absorptency and heat transfer analysis on various materials
- Reviewed and analyzed returned products and produced reports determining source of error and possible solutions

### **Keurig-Green Mountain Coffee Roasters**

#### **R & D Portion-Pack Product Development Co-op**

January 2014—May 2014

Burlington, MA

- Assisted team in the development of the K-Carafe portion pack to be used in the Keurig 2.0 brewing system
- Collected, analyzed, and reported progress on brewing data in technical reports and weekly team meetings
- Designed original testing fixtures using SolidWorks to qualify component designs and performance
- Performed, corroborated, and improved testing methods & procedures on coordinate measuring machines and production lines

## Other Work Experience

A Blade of Grass Landscaping

General Maintenance

May 2013—August 2013

Garrick-Santo Landscaping

General Maintenance

May 2012—August 2012

DiNanno Landscape

General Maintenance

May 2011—August 2011

## ENGINEERING DEVELOPMENT PROJECTS

### **"Strength Analysis of an Engine Hoist"**

January 2015—March 2015

Used Excel, EES, and SolidWorks' FEA simulation to analyze and redesign an engine hoist to pass for required factor of safety. Submitted report using Word. Presented methods and results using PowerPoint.

### **"Analysis of a Damped SDF Hydraulic Valve System"**

January 2015—March 2015

Analyzed and simulated a simplified hydraulic valve system with harmonic force using Excel and MatLab. Submitted report using Word. Presented methods and results using PowerPoint.

### **"Heat Transfer Analysis of a Simple Engine"**

May 2014—August 2014

Simplified, designed, and analyzed an air-cooled V-twin motorcycle engine using Engineering Equation Solver (EES) and SolidWorks to determine its heat transfer rate and heat transfer properties. Submitted report using Word. Presented methods and results using PowerPoint.

### **"Fishing Line Analysis"**

May 2014—August 2014

Troubleshoot and invented test procedures for testing and analyzing different types of fishing lines against rated pound test. Used Instron tensile testing machine and scanning electron microscope for testing and analysis. Submitted report using Word. Presented methods and results using PowerPoint.

### **"Analysis and Simulation of a Motor"**

January 2013—March 2013

Used SolidWorks, Excel, Word, and EES to create an analytical report describing the interactions of a piston-cylinder assembly motor. Produced a 30-page report including all technical drawings and calculations required to redesign a motor with new design specifications for different power output capabilities.

## TECHNICAL SKILLS

**Engineering:** Product Development, Product Testing, Product Design, Coordinate Measurement Machines, Production Lines, Scanning Electron Microscope, Tensile Testing, Torsion Testing, Strength Testing, Flowmeters, Evaporators, Condensers, Heat Pumps, Rotometers, Thermocouples, Heat exchangers, Mixing Chambers

**Language/Tools:** C++, MS Visual Studio, R, MatLab, Engineering Equation Solver (EES)

**Software:** SolidWorks, Creo Simulation (Pro-E), MS Office (Word, Excel, PowerPoint, Project, Publisher, OneNote), MS Outlook, Multisim, LabView

## EDUCATION

Wentworth Institute of Technology, Boston, MA

Bachelor of Science: Mechanical Engineering

Expected Graduation: August 2015

GPA: 3.15

Dean's List; Spring 2015