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# SAMUEL T. ELLIS

Rensselaer Polytechnic Institute  
B.S. Mechanical Engineering

## EXPERIENCE

**Micross Components (Corfin)**      Engineering Group Lead      Jul 20 - Present, Manchester, NH

- Assign tasks, determine priorities, and provide guidance to a group of 7 engineers
- Write ROIs for new automation equipment to improve manufacturing throughput
- Provide technical support to sales for new and existing customers
- Manage the design and implementation of new tooling fixtures
- Work directly with customers to generate quotes for non-standard jobs
- Write and present qualification plans for new products / exchange of business

**Corfin Industries**      Senior Process Engineer      Apr 19 - Jul 20, Manchester NH

- Designed, built, and implemented a drawing review procedure for the engineering team
- Organized and implemented a task management and priority system for the engineering team
- Design custom processing fixtures using aluminum, titanium, stainless steel, and composites
- Main engineering contact during the quoting phase for complex proposals
- Modify current processes with additional automation to increase efficiency and decrease variance
- Pick and Place machine programming; instructor for technicians and operators

**Raytheon**      Mechanical Engineer      Apr 15 - Apr 19, Tewksbury MA

- Led cross functional team for one aspect of a complete system redesign
- Manufacturing floor support for mechanical issues on various subassemblies
- Design for Manufacturability and Assembly – Mechanical design on CCAs and electronics housings
- Design proofing with tolerance analyses, material / hardware compatibility, and cost analysis
- SMT line fault analysis, temperature profiling, pick and place validation, ease of automation studies
- Draft and test upgrade procedures for multiple subassemblies and systems
- Write whitepapers to detail existing issues and propose solutions to maintain production schedule
- Travel to different customer locations to perform inspections and demonstrate upgrade procedures

**EZCoaching Online**      Engineer / Web Developer      Jan - Jun 2014, Troy NY

- [Web App] Front End design implementation for swim practice creation and performance tracking
- [Wearable Device] Product design and minimum viable product concept creation and testing

**Hasbro**      Product Design Engineer      Jan - Jul 2012, Providence RI

- Design for plastic injection molding for multiple board game brands
- 3D print prototype designs to test with marketing and ensure proper game functionality
- Creation of product specifications (BoM, packaging, weekly capacity, country forecast)

## PROJECTS

**Probot**      Rensselaer Polytechnic Institute      Apr 2013

- Programmable robot to help children learn programming and puzzle solving skills
- Rapid prototyping, project renders, mechanical system selection, and customization design

## SKILLS & CERTIFICATES

- Proficient with SolidWorks, ProEngineer, Microsoft Office, Windchill PDM, 3D Printing, Visio
- Prior experience with HTML, CSS, JavaScript, Python, Ruby, Plastic Injection Molding Principles

**ASME GD&T Technologist Level Certified**