

# Benjamin Lorenzetti

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## Education

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### University of Cincinnati

Pursuing BS in Electrical Engineering, Minor in Chemistry, 3.56/4.00  
Previously pursuing BS in Mechanical Engineering

Cincinnati, OH

2013–Dec. 2016

2010–2012

## Experience

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### Proctor & Gamble Duracell

Manufacturing Engineering Co-op

Managed several engineering projects at the C&D cell make plant and the packaging center:

- Completed design review, capacity study, and VAT plan for new robotic copalletizers
  - Led cross-disciplinary team of line technicians, E&I technicians, HS&E, procurement, and engineering
  - Primary POC for vendors
- Prepared scope of work and solicited quotations for PLC replacement
- Organized presentation for management on new packaging technologies

Cleveland, TN

Summer 2015

### University of Cincinnati BioMicroSystems Lab

Research Co-op

Responsible for improving user interface of electrochemical, analytic sensors being developed at UC.

- Designed PCB for interfacing commercial potentiostat with Pb & Mn sensors
- Built enclosure for potentiostat/PCB
- Wrote software GUI in C/C++, utilizing libusb, Berkley Sockets, and pthreads library

Cincinnati, OH

Fall, Spring 2014

### Toyota Technical Center

Materials Research Co-op

Fabricated superparamagnetic nanoparticle compacts and optimized their bulk-magnetic properties.

- Improved oxygen-free enclosure for transporting air-sensitive nanoparticles
- Developed sintering/annealing technique for *Permendur*/ $\text{SiO}_2$  core/shell nanoparticles
- Managed day-to-day maintenance and chemical inventory of Lab M2
- Oversaw installation of vibrating sample magnetometer (VSM) and authored TTC operating manual

Ann Arbor, MI

Spring, Fall 2012

### TecEdge Discover Lab

Engineering Intern

Compared various commercial technologies for their potential to generate power in remote locations

Dayton, OH

Summer 2011

## Technical Skills

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**Languages and Libraries:** C, C++, libusb, pthreads, MathGL,  $\text{\LaTeX}$ , MATLAB, HTML5, CSS3

**Tools:** CadSoft Eagle, KiCad, NGSPICE, DraftSight, SolidWorks, Apache, Postfix

## Honors and Awards

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Eagle Scout Award, National Merit Scholar, UC | 21 Scholar, Elks Most Valuable Student Scholar

## Personal Projects

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### Easy-PCB Oven

<https://github.com/benlorenzetti/Breadboarding-Oven>

A homemade convection oven for paste soldering SMD and BGA components