

Benjamin Lorenzetti

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Education

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

Fairborn High School

High School Diploma, 4.0/4.0

Fairborn, OH

2006–2010

Experience

Proctor & Gamble Duracell

Manufacturing Engineering Co-op

Cleveland, TN

Summer 2015

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

- New collaborative robot palletizers (CoPals) for Lines 285 and 291.
 - POC with vendors, design reviews, capacity study, VAT plan, training plan, safety req., installation plan.
 - Organized cross-disciplinary team of line technicians, E&I technicians, HS&E, procurement, and engineering.
- Replacement of Lifetest PLC and thermocouples (scope of work and quotations)
- Survey of new packaging technologies (brought in several vendors and held presentation for management)
- Held successful culture, morale, and safety event with other Co-ops

University of Cincinnati BioMicroSystems Lab

Research Co-op

Cincinnati, OH

Fall, Spring 2014

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

Toyota Technical Center

Materials Research Co-op

Ann Arbor, MI

Spring, Fall 2012

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*/*SiO₂* 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

TecEdge Discover Lab

Engineering Intern

Dayton, OH

Summer 2011

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

Technical Skills

Languages and Libraries: C, C++, libusb, pthreads, MathGL, \LaTeX , MATLAB, HTML5, CSS3

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

Honors and Awards

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

Community Involvement

St. Monica St. George Parish

UC Breakfast Brigade

Cincinnati, OH

2010–2015

Breakfast brigade is a service organization sponsored by St. Monica St. George Catholic Church. We prepare breakfast for day laborers in Cincinnati, who rarely have enough time to eat between reporting at their agency and commuting to work assignments. Breakfast is served every Thursday, 4:30–5:00 a.m., at Labor Works Cincinnati.

Personal Projects

Easy-PCB Oven

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

A homemade convection oven for paste soldering SMD and BGA components.