Benjamin Lorenzetti

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Education

University of Cincinnati — **Cincinnati, OH**
Pursuing BS in Electrical Engineering, Minor in Chemistry, 3.56/4.00 — *2013–Dec. 2016*
Previously pursuing BS in Mechanical Engineering — 2010–2012

Fairborn High School — **Fairborn, OH**
High School Diploma, 4.0/4.0 — *2006–2010*

Experience

Proctor & Gamble Duracell — **Cleveland, TN**
Manufacturing Engineering Co–op — *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.
- Conveyor modifications for CoPals (scope of work and quotations)
- Replacement of Lifetest PLC and thermocouples (scope of work and quotations)
- Survey of new packaging technologies (brought in several vendors and had presentation to managers)
- AGV feasibility study
- Held successful culture, morale, and safety event with other Co–ops

University of Cincinnati BioMicroSystems Lab — **Cincinnati, OH**
Research Co–op — *Fall, Spring 2014*
Responsible for improving user interface of point-of-care sensors being developed at UC.
- Thumb-sized electrochemical sensors for measuring heavy metal concentrations in H_2O/blood
- Designed PCB for interfacing commercial potentiostat and custom sensors
- Built enclosure for potentiostat/PCB
- Wrote software GUI in C/C++, utilitzing libusb, Berkley Sockets, and pthreads library

Toyota Technical Center — **Ann Arbor, MI**
Materials Research Co–op — *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 $Permendur/SiO_2$ 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

TecÊdge Discover Lab — **Dayton, OH**
Engineering Intern — *Summer 2011*
Compared various commercial technologies, with regard to their potential for generating power in remote locations

Technical Skills

Languages and Libraries: C, C++, libusb, pthreads, MathGL, LaTeX, 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   **Cincinnati, OH**
UC Breakfast Brigade Student Leader   *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.

Hughes High School   **Cincinnati, OH**
Bearcat Coders   *2016*
Bearcat Coders is a peer mentoring program that partners UC students with classes at Hughes High School with the goal of helping learning and generating enthusiam for education in an inner–city setting.

Personal Projects

Easy–PCB Oven: A small convection oven for paste soldering SMD and BGA components

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