

Daniel B. Wedig

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Education

Northwestern University, Evanston, IL
Robert R. McCormick School of Engineering and Applied Science
Bachelor of Science in Biomedical Engineering, Minor in Computer Science
GPA: 3.10

2012-2016 (Anticipated)

Engineering Experience

Global Health Capstone Design Project, Northwestern University

September 2015 - Present

- Design, build, and present effective, affordable surgical and sterilization equipment for underserved regions of Africa
- Work closely with a team of Northwestern Engineering students and a professional client to meet safety and functionality requirements

Design Thinking and Communication I, Northwestern University

April 2014 – June 2014

- Designed, built, and demonstrated an underwater propulsion system for use by paraplegic divers
- Worked closely with professional client to meet safety and functionality requirements

Design Thinking and Communication II, Northwestern University

September 2013 – December 2013

- Conceptualized, constructed, and presented a unique hip brace for use by the Rehabilitation Institute of Chicago
- Collaborated with a team of four to research the problem, create progress reports, and test prototypes

Patent Design Intern, Cognitek

June 2014 – September 2014

- Corresponded with the CEO of Cognitek, a pioneer in renewable energy resources
- Produced conceptual drawings and descriptions of renewable energy systems to be used in patents

CASPiE Laboratory Research, Northwestern University

January 2013 – March 2013

- Designed and executed independent research project
- Analyzed the antioxidant activity in different varieties of orange juice
- Implemented TEAC assay and polyphenolics testing to affirm the health benefits of organic juice
- Presented findings at a research fair at Northwestern University's Technological Institute

Professional Experience

Intern, Nanosphere Molecular Diagnostics

June 2015 – September 2015

- Work closely with Chief Strategic Officer and Director of Project Management to increase efficiency and impact of current projects
- Design and construct databases for project plans and results

Program Assistant, Northwestern Master of Biotechnology Program

January 2013 - Present

- Work closely with associate director to optimize course quality and format
- Conduct research on competitive programs to advance NUMBP's position
- Correspond with prospective students to answer questions about the program and aid in the application process
- Organize application materials for review by admissions board

Computer Systems Consultant, Parkway Pediatrics

June 2012 – September 2012

- Aid in the implementation of electronic medical records
- Organize hard copies of records for an easier transition to the electronic system

Technical Skills

Relevant Coursework

- Electronic Circuits (theory and construction), Digital Systems and Signals (theory and application) Physics (statics, dynamics, E&M, waves), Data Structures, Mathematics (vector calc, Diff Eq., linear algebra, statistics), Chemistry (organic and inorganic), Fluid mechanics, Materials Science (including mechanics of materials), Thermodynamics, Design (three design courses), Physiology, Genetics

Programming

- Object oriented (C, C++), Swift, Python, Racket, Ruby, MATLAB

Laboratory

- Knowledgeable in imaging techniques: MRI, X-Ray, Radionucleotide, Ultrasound
- Knowledgeable in the function of ECG, EEG, and pulse oximetry
- Chemistry lab techniques, spectrophotometer, TEAC assays, polyphenolics testing
- Physics lab techniques (electricity and light related)