



EDUCATION

Northwestern University

(2009 – 2013)

- ♦ McCormick School of Engineering and Applied Science (GPA: 3.71 / 4.0 through Spring 2012)

RELEVANT COURSES

Data Structures and Algorithms, C++ Programming, Java Programming, Computer Systems, Differential Equations, Multivariable and Vector Calculus, Linear Algebra, Probabilistic Systems

EXPERIENCE

Google, Software Engineering Intern (Cambridge, MA)

(present)

Northwestern Interactive Audio Lab, Undergraduate Research (Evanston, IL)

(March 2011 – present)

- ♦ Helped develop Tunebot, a vocal search engine that can identify songs you sing
- ♦ Developed a method of reducing noise in audio that improved Tunebot search results

General Motors, Software Engineering Intern (Warren, MI)¹

(June – September 2011)

- ♦ Battery Pack Electronics lab
 - Designed hardware and wrote software in C to run diagnostics on the Chevy Volt resulting in a potential annual savings of over \$1,000,000 and is under review for a patent
 - Automated numerous tests using C programs saving hundreds of hours of manual labor

XFI Corporation, Software Engineering Intern (Bethesda, MD)

(July – September 2010)

- ♦ Developed MATLAB tools to aid data creation in SalesHawk, a comprehensive sales software suite used at Fortune 100 companies
- ♦ Ran rigorous software regression tests on current and future versions of SalesHawk
- ♦ Proposed improvements to SalesHawk's fuzzy logic engine

National Institutes of Health, Intern (Bethesda, MD)

(September 2008 - August 2009)

- ♦ Developed algorithms to normalize and analyze 3D confocal images of *Drosophila melanogaster* (fruit flies)

SKILLS AND PROJECTS

- ♦ Proficiency in C, C++, C#, Java, Ruby, Python, MATLAB, and Silverlight/XAML
- ♦ Ruby on Rails
- ♦ Visual Studio
- ♦ Windows Phone 7 development
- ♦ Stagecoach – A career management platform for the film industry (2012)
- ♦ Designed a glove to increase the dexterity of stroke survivors (2010)
- ♦ Designed an underwater communication device for deaf scuba divers (2009)

AWARDS, CERTIFICATION, AND RECOGNITION

- ♦ First Place – Connected World Conference 36 Hour Hackathon (2012)
- ♦ Boss Kettering Award Nomination (Highest Technical Award at GM) (2011)
- ♦ Illinois Technology Association Fall Programming Challenge – Top 3% (2011)
- ♦ Outstanding Engineering Design Award, Maryland Space Business Roundtable (MSBR) (2009)
- ♦ AP Scholar with Distinction (2009)
- ♦ High School Programming Contest, University of Maryland (2008)

ADDITIONAL INFORMATION AND INTERESTS

- ♦ Sports Photographer, The Daily Northwestern (gpealphotography.com) (2010 – present)
- ♦ Northwestern University, Ultimate Frisbee team (2009 – present)