ALEXANDER FRIEDMAN

www.alexfriedman.me | alexanderfriedman2018@u.northwestern.edu | 857-294-4600

Education

NORTHWESTERN UNIVERSITY – Evanston, IL   Class of 2018
McCormick School of Engineering and Applied Science
Candidate for B.S. in Product Design Engineering; GPA 3.62/4.00
- Leadership Certificate from the Northwestern Center for Leadership
- Relevant Coursework: Human Centered Product Design, Mechatronics Design, Human Computer Interaction, Design for X, Autonomous Robot Design Competition, Mechanical Design and Manufacturing, Mechanics of Materials, Materials Selection, Engineering Analysis, Advanced Solid Modeling (SolidWorks)

Relevant Experience

Zume Pizza – Mountain View, CA   Summer 2017
Robotics Product Manager Intern
- Redesigned custom pizza ovens for 600% increased throughput, saving roughly $11,500 per food truck, reducing delivery times by 6 minutes and freeing up space for more refrigerators
- Designed and manufactured custom parts including heating pad cases, structural frames and shelving

Siemens Healthcare – Hoffman Estates, IL   Summer 2016
Mechanical Engineering Intern
- Designed and modeled injection molded covers and mounting system for next generation diagnostic imaging system; 3D printed models used by senior management to determine direction of design
- Investigated user complaints, conducted testing, analyzed data and wrote engineering change order

Segal Design Institute Prototyping and Fabrication Lab – Evanston, IL   Fall 2015-Present
Design Consultant and Prototyping Specialist
- Advised students on design and engineering projects as well as provided manufacturing support
- Taught engineering students to use machining tools including lathes, 3D printers and laser cutters

Alex Friedman Design – Evanston, IL   2012-2015
Founder of Logo Design Company

Engineering Projects

ASSIST – Evanston, IL   Winter-Spring 2017
- Co-designed and built a system of smart goals to record shooting accuracy and reflex time; Designed and built mechanical components of goals, lead prototyping process and conducted user testing

Autonomous Robot Design Competition – Evanston, IL   Spring 2017
- Placed third in autonomous hide and seek competition; Implemented position tracking, path finding and hunter detection and avoidance using VIVE lighthouse, phototransistors and bump sensors

RotoRinse – Evanston, IL   Fall 2016
- Designed and built a hydraulic powered makeup brush cleaner working with a multidisciplinary team of non-engineers; Designed entire product, manufactured all prototypes and researched intellectual property

Activities and Leadership Experience

Northwestern University Baja SAE Racing Team – Evanston, IL   Fall 2014-Present
President and Project Manager
- Lead team of 40 students in design and construction of a four wheel, off-road vehicle made to overcome any obstacle; Placed 21st in design at Tennessee race and 7th in maneuverability at Midnight Mayhem of 100
- Designed truss pattered trailing arm to be 8% lighter using FEA and eliminated 33% of weld lines

Skills and Interests
- **Computer Skills:** SolidWorks, Siemens NX (unigraphics), Adobe Illustrator, Adobe Photoshop, Adobe InDesign, Microsoft Word, Microsoft Excel, web design, proficient with Windows and Mac OS
- **Coding Languages:** Arduino, C, C++, CSS, HTML, MatLab, PHP
- **Interests:** Passion for graphic design and product archeology; avid fisherman; Sigma Chi Fraternity