

# Christian R. Braun

Product Design Engineer

braun.christian.r@gmail.com ✉

+1 (847) 845-5854 📞

Milwaukee, WI 📍

christianbraundesign.com 🌐

My passion is uncovering hidden field research insights to develop products that are a delight to use.

## EDUCATION

### BS, Manufacturing and Design Engineering

Northwestern University | Evanston, IL

09/2017 - 06/2020

Summa Cum Laude

#### Relevant Coursework

- Human-Centered Product Design
- Mechanics of Materials
- Biomechanics
- Computer-Aided Manufacturing

## WORK EXPERIENCE

### Concept Engineer

Milwaukee Electric Tool Corporation

10/2020 - Present

Milwaukee, WI

#### Achievements

- Rapidly produced more than 30 sets of CAD models and 3D-printed prototypes in 4 weeks to iteratively optimize product concepts for performance and ergonomics
- Synthesized a product roadmap for the future of work-site safety using insights drawn from observations on construction sites and stakeholder interviews
- Led end users through scenarios with prototypes of ranging fidelities to validate or refute concept design intent and function
- Identified opportunities for innovation in market landscapes through adjacent market research, informal product testing, and patent queries

Reference: Chris Hoppe - Manager, Hand Tool Concept Engineering - [chris.hoppe@milwaukeetool.com](mailto:chris.hoppe@milwaukeetool.com)

### Product Development Engineering Intern

Steelcase Inc.

05/2020 - 10/2020

Grand Rapids, MI

#### Achievements

- Led collaboration with design, sales, and manufacturing to develop a new integral door pull that improved user experience while reducing cost by 20 percent
- Leveraged parametric CAD modeling to simplify product data management, reducing part numbers by over 97 percent
- Led meetings with manufacturing partners to review assembly drawings, assess production feasibility, and make cost-minimizing design alterations
- Communicated research insights, design iterations, and production plans to a diverse audience in various media including paper sketches and slideshows
- Referenced ANSI/BIFMA, ADA, and internal performance standards to design, plan, and execute product performance testing

Reference: Brad Youngs, PE - Product Engineering Manager - [byoungs@steelcase.com](mailto:byoungs@steelcase.com)

### Mechanical Engineering Intern

Marmon Foodservice Technologies

06/2019 - 06/2020

Carol Stream, IL

#### Achievements

- Identified market trends, user experience difficulties, and innovation opportunities through immersive field research in grocery stores and QSR kitchens
- Researched existing intellectual property, identified market whitespaces, and designed new QSR kitchen equipment included in 6 provisional patents
- Analyzed over 300,000 data points from performance testing to determine the best supplier of internal heating components
- Designed and developed rapid responses to COVID-19 for customer-facing bulk product dispensers while working remotely with sales and engineering teams

Reference: Chris Lyons - President, Trade Fixtures - [clyons@tradefixtures.com](mailto:clyons@tradefixtures.com)

## SKILLS

Advanced Solid, Surface, and Hybrid modeling

Intermediate Sheet Metal modeling

Intermediate GD&T

Basic FEA and Intermediate Stress Analysis

Advanced Ethnographic Field Research

Advanced Design Sketching and Rendering

Intermediate Patent Research

Advanced Rapid Prototyping and Machining

## SOFTWARE

SolidWorks, NX, Creo, Inventor

Computer Aided Design

Arduino IDE, Java, C++

Coding

Excel, Minitab, MATLAB

Experimental and Research Data Analysis

Keyshot, Photoshop, Illustrator

Rendering and Graphic Design

Windchill

Product Data Management

## ACHIEVEMENTS

Summa cum Laude (06/2020)

Awarded to students graduating in the top 5% of their class in the Northwestern University McCormick School of Engineering.

Lake Forest High School Applied Technology Department Award (05/2017)

\*Awarded once per year to one senior who has done outstanding work in the Applied Technology department.\*

Eagle Scout (07/2015)

## ASK ME ABOUT

Northwestern Club Rugby

Volunteering at Camp Hope Illinois

Woodworking

Rock Climbing

Backcountry Hiking & Camping