

# KENDALL TOERNER

## **PROFESSIONAL SUMMARY**

Full Stack Software Developer, Industrial Designer, and Biophysics Practitioner with a wide array of software and hardware development experience. Fluent in 8 programming languages, I've written millions of lines of code, created many software solutions for in-house for innovation projects, and have published two of my own hobby apps to the App Store. I've successfully developed software and products from kitchen faucets and home goods, to consumer electronics, outdoor gear, micro-mobility vehicles, garage door openers, and even industrial sortation machines.

My goal is to join a team taking a role within or near my existing wide skillset, focused on leading remarkable development, growth, and change within an open minded organization (and definitely learning a thing or two along the way). Skilled in many fields due to my always expanding array of interests, not limited to design, biophysics, photography, manufacturing, software, holistic medicine, engineering, marketing, and prototyping. As an INTJ, I'm endlessly curious and analytical, learning continuously, and quickly and applying my skills with a relentless truth and criticism-seeking mindset. Although I have these task oriented skill traits, I'm very down to earth and friendly.

Having worked for large corporations (Honeywell, Moen), corporate consultancies (Meta/Oculus), independent consultancies (Whipsaw, Balance), as well as run my own industrial design consulting business, my understanding of the software and hardware design process through many lenses, has been deeply refined. I have worked extensively with software teams 15+ in size and manufacturers, both state side and overseas, to assure user experience and aesthetics follow through with strict but realistic costs, standards, and time frames.

## **SKILLS**

### **SOFTWARE DEVELOPMENT**

C, C#, Objective-C, C++, VB, Python, Java, Swift  
Full Stack Development, TypeScript, JavaScript, React.js, Node.js, HTML, CSS, PHP  
Visual Studio, Xcode, Arduino, Raspberry Pi, Processing IDE, Matlab  
AWS, Azure, Internet of Things Networking  
Soldering, Electronics Prototyping, PCB Design

### **3D - RENDERING - ANIMATION**

SolidWorks, Rhino/Grasshopper, Creo/ProE, NX, Fusion 360, Alias, Maya  
Keyshot, C4D, Houdini, Redshift, Vray, ARkit

### **UI UX - GRAPHIC - VIDEO - MOTION**

Adobe Illustrator, Photoshop, InDesign, Lightroom, Premiere, After Effects  
Figma, Principle, Sketch App  
Procreate, Sketchbook, Astropad  
Apple Final Cut Pro X, Motion

### **BIOPHYSICS AND HOLISTIC HEALTH**

Deep knowledge of human biology via biochemistry and biophysics pathways to solve typically incurable chronic diseases. Extensive understanding of metabolic, holobiome, and environmental health.

## **EXPERIENCE**

### **OFFSET INVENTIONS**

**Director of Industrial and Product Design, Head of Software Engineering - Seattle, WA**  
**May 2019 - Current**

Co-founder of an award-winning Industrial Design, Software Development, and Creative Consultancy. Broad industry experience with large companies, consultancies, startups, and independent clients, designing and inventing dozens of different hardware products alongside their corresponding software architecture from start to finish. Using a unique combination of first principles and cross-pollination, we have created unmatched experiences with iconic differentiation.

### **ARRIVAL WELLNESS**

**Biophysics Health Practitioner - Seattle, WA**  
**April 2022 - Current**

Founder of a biophysics-based health program, using a self-developed proprietary treatment protocol that resolves traditionally incurable health conditions by solving for several paradoxes in our biological systems.

### **MICRO ELECTRIC**

**Head of Software Engineering, Lead Industrial Designer - Seattle, WA**  
**December 2020 - May 2022**

Successfully developed the user experience, firmware, software functionality, form factor, and hardware for several new electric vehicle products from the ground up. Among other form factors, completely reimaged e-bike and e-scooter products, currently in P1 production phase. Direct successful management of software and manufacturing development teams in Europe, Taiwan, and China to execute our vision that is implanted in our current products. Extensive in-house prototyping and testing of software, hardware, ride quality, and user experience. Successful implementation of a new visual brand language and design family philosophy.

### **OCULUS VR META**

**Industrial and Product Designer (contract) - Seattle, WA**  
**August 2019 - December 2019**

During a 4 month pre-set contract between university semesters, invented and distilled several key new directions for software, accessories, and charging previously unconsidered by design and engineering. Rhino and NX 3D ideation on hundreds of concepts for the future of Virtual Reality headsets and accessories. Hands on design, figma design, functional prototyping, machining, 3d printing, surface modeling, and programming. Up and running as a new user to NX in one week, with full surface, solid modeling, and scripting skills.

### **WHIPSAW**

**Junior Industrial and Product Designer (contract) - San Francisco, CA**  
**January 2019 - May 2019**

During a 4 month pre-set contract between university semesters, created final chosen design for four client projects over a four month period. Twelve client projects acting as full time junior designer. Client relations, concept development/generation/refinement with sketching, UI/UX storyboarding and development, SolidWorks and Rhino CAD 3D modeling, Keyshot rendering, hands on foam core mockups/physical model making. Presentation creation, oral presentations, internal team brainstorming, and final design production.

### **GRAYL**

**Industrial and Product Designer (contract) - Seattle, WA**  
**May 2018 - August 2018**

During a 4 month pre-set contract between university semesters, led new product development, inventing a brand new and patented infinitely self-recharging portable water purifier, including electronics and PCB design, user experience, sourcing, and engineering.

### **BALANCE INNOVATION AND DESIGN**

**Industrial and Product Designer (contract) - Cleveland, OH**

## **August 2017 - December 2017**

During a 4 month pre-set contract between university semesters, successfully pushed four client concepts to production, rethinking their products from the ground up including unique mechanism problem solving. Implemented new design software and strategies for 3D printing and Rendering over just a few months. Successfully led development of an Augmented Reality app on the App Store with Swift and JavaScript. 3D modeling, sketching, ideation, foam core mockups, working prototypes.

## **MOEN**

**Industrial Designer (contract) - Cleveland, OH**

**January 2017 - May 2017**

During a 4 month pre-set contract between university semesters, successfully led the invention of an entirely new patented smart faucet system from ground up. Software engineering with Swift, C#, app development, functional app prototyping, UI and UX development, advanced surface modeling with PTC Creo / Pro Engineer (ProE), sketching, rendering, product family development, market research, and extensive collaboration with marketing and engineering teams. Up and running as new Class-A Surfacing Creo user in two weeks, surface modeling dozens of watertight modeled concepts for rendering and engineering.

## **HONEYWELL INTELLIGRATED**

**Mechanical Engineer - Mason, OH**

**May 2013 - December 2016**

Successfully created several hundreds of engineering drawings and 3D models for internal development, product production, and customer service purposes, alongside a team of 12 engineers, leading to several large new multi million dollar sortation machine models. Led development of advanced integrated full stack connected IOT test systems using a combination of my own custom software and hardware, revealing real world data for making future engineering choices and existing product modifications. Designed, built, and tested dozens of software, hardware, and UI prototypes for embedded systems, using C#, Objective-C, Arduino, and JavaScript. Four years of extensive work with SolidWorks and 3D printing to create, modify, and maintain products and prototypes for R&D and CS. Travelled locally and internationally to successfully commission 4 customer distribution center sites for companies such as Target, Amazon, and Walmart.

## **EDUCATION**

**University of Cincinnati 2020**

BS - Industrial and Product Design

Minor - Marketing

Previous - Mechanical Engineering

24 credit hours in Software Development as a hobby during school

## **EXTRACURRICULAR**

### **PATENTS**

Listed as inventor on five pending patents, products heading toward production. More patents in progress.

### **RED DOT: BEST OF THE BEST**

Design award for Xenon Ultraportable Drone

### **UC HYPERLOOP DESIGN TEAM**

SpaceX Hyperloop design competition headed by Elon Musk. Designing the future of transportation. Our team finished as a finalist in the top 22 teams internationally. Helped with design, rendering, animation, and graphic content

### **SPEECH PATHOLOGIST COMMUNICATION APP**

Developed an individualized app for Speech Pathologists to help people with speech and language impairments

**UC ROWING TEAM**

Rowed as the lead pace seat in the boat. Earned gold in the Head of the Hidden Dragon Regatta

**COMMUNITY SERVICE**

Over 100 hours of community service helping at places including Stepping Stones and Matthew 25: Ministries.

**Design Portfolio** [www.KendallToerner.com](http://www.KendallToerner.com)

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