

Experience

- Ventana Cards, Co-founder & Lead Designer** *Fall 2017 - current* Durango, CO
- Generating new forms of interactions/communications with greeting cards and physical print
 - Creating prototype cards and writing copies for proof-of-concept user testing
 - Developing tools and templates to facilitate faster prototyping and printing
- Feynman Academy, Co-founder & Interaction Designer** *Winter 2016 - current* Durango, CO
- Prototyping educational experiences focusing on online college-level STEM learning resources
 - Designing and programming HTML/JS interactives to complement our hypermedia content
 - Running initial user testing, evaluating prototypes and identifying key target audience
- Hewlett Packard Enterprise Labs, Research Engineer** *Winter 2015 - Fall 2016* Palo Alto, CA
- Explored applications of video game mechanics and technologies to the enterprise experience
 - Developed new system visualization tool using 3D environments to provide a cohesive visual experience while maintaining enterprise level functionality
 - Ideated and prototyped futuristic user interfaces for marketing and technical applications, merged classical HTML interfaces with virtual environments using Unity 3D
 - Pitched demos and proof of concepts to internal business units and key stakeholders
- Northwestern University, Research Assistant** *Fall 2013 - Winter 2015* Evanston, IL
- Prototyped tangible programming interface for a new exhibit at the Computer History Museum by combining custom RFID technology and a multitouch table.
 - Evaluated educational impact of table-top games via surveys and in-situ user testing sessions
 - Designed and implemented an educational multiplayer video game about sustainable fishing for an exhibit at the Shedd Aquarium and an iOS version, made available on Apple's App Store
- Independent Contractor, Designer** *Winter 2012 - Fall 2013* San Francisco, CA
- Designed and assembled custom test fixture for electromechanical product
 - Drafted RFID hardware prototypes for augmenting physical game lounge interactions
- Stupid Fun Club, Designer/Prototyper** *Summer 2010 - Winter 2012* Berkeley, CA
- Brainstormed and conceptualized hundreds of toy products
 - Explored a variety of toy to toy play styles for connective and responsive systems
 - Implemented a low cost robotic platform capable of obstacle avoidance and navigation
 - Developed organic-like mechanical locomotion system for alien robotic toys
 - Engineered optics for Ant Farm Revolution prototype, currently available online and in stores

Education

- Northwestern University**, currently enrolled - part time, nights/weekends
- PhD Student, Human Computer Interaction in Computer Science, Advisor: Dr. Michael Horn
 - Researching the use of 3D content and organization styles for teaching complex systems
- Carnegie Mellon University**, Graduated *Summer 2010*
- Masters in Entertainment Technology from the Entertainment Technology Center
- California Institute of Technology**, Graduated *Summer 2008*
- B.S. Mechanical Engineering

Skills

- Interaction Design:** Personas • Use Case Scenarios • Storyboard • Paper Prototyping • Mockups
User / Product Research: Interviewing • Usability Testing • Surveying • General Observation
Design Software: Unity3D • Solidworks • Illustrator • InDesign • Photoshop • 3D Studio Max
- Languages:** Javascript • HTML/CSS • C# • Python • Google Dart • C/C++ • Arduino/Processing
Other Software/Packages: Bootstrap • NodeJS • Django • Mathematica • Matlab • Microsoft Office
Physical Prototyping: Rapid Prototyping • 3D Printing • Laser Cutting • Metal/Wood Machine Shop
• CNC, Tormach PCNC1100 • Arduino • RPi • Beaglebone boards • Basic analog circuits.