

ZACK WILSON

PORTFOLIO

DESIGNER | ARTIST | RESEARCHER

Selected works from 2011-2020

Ck-12 Foundation (2011-16)



I began working at the Ck-12 Foundation as a design intern after highschool, then was offered to continue there as a designer and illustrator when their in-house designer left.

I began on the graphic and visual design side, illustrating textbooks, especially those in science and math.

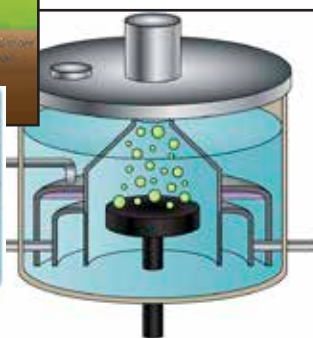
I slowly shifted to take on more user-interface and experience design roles, developing web and app prototypes, then leading a team in developing a new "Study Guide" product they wanted to offer.

I also helped to conduct UX and QA testing on a new tool they developed for teachers to build interactive science questions.

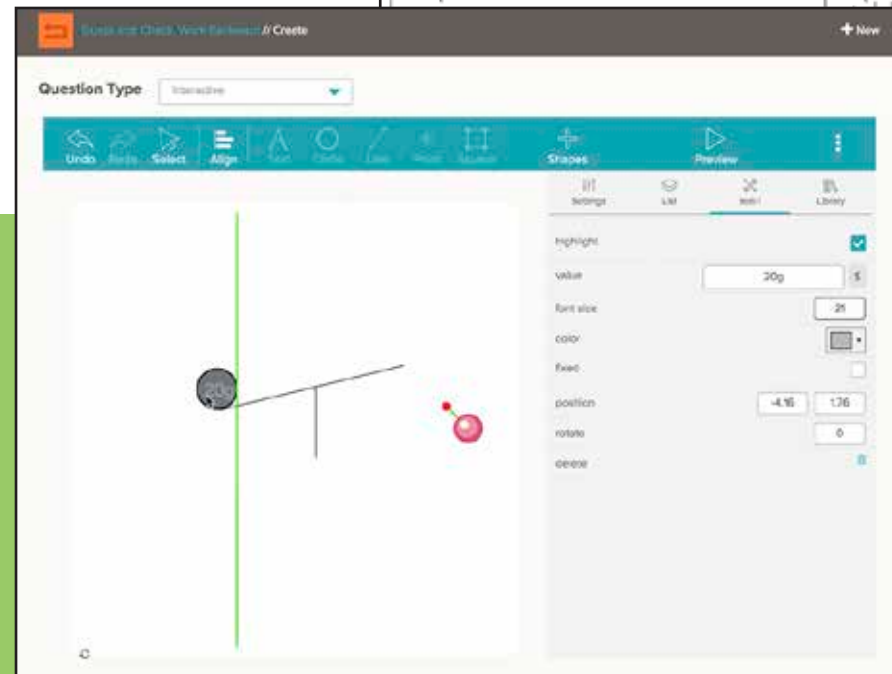
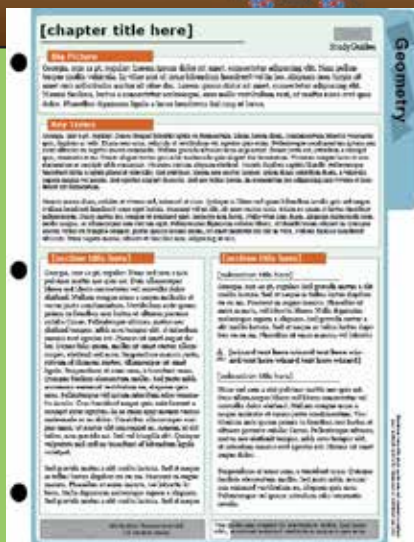
I helped to populate a sample library with designs, and through this process helped to refine and debug the tool.

I worked between the developers, the product owner, and teachers to investigate what functions were necessary, what was missing, and what was unnecessary.

Web-tool mockups



Illustrations and study guides



The interactive question tool

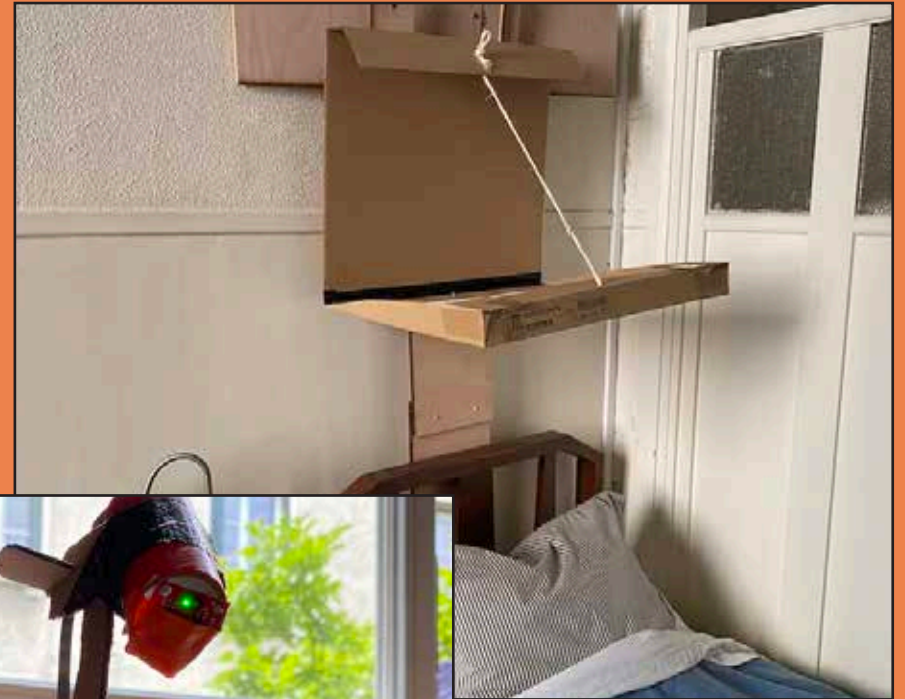
Embodied Creativity Support Tools (2020)

This project was conducted in the LRI human-computer interaction lab at the Université Paris-Saclay, INRIA, Paris, France.

Although today's Creativity Support Tools support cognitive ideation, few incorporate recent research pertaining to the embodied nature of creativity. I collected 70 stories from creative professionals, and identified three strategies they use to support and force creativity: the signature toolbox, a "mind*@" mindset, and manufactured obstacles. I designed three technology probes, the DreamEasel, the FidgiPen, and the AirSampler, that illustrate how to incorporate embodiment into the design and

implementation of creativity support tools. I deployed them with three creative professionals over two weeks and found success in not only supporting, but also stimulating creativity.

This research was funded by the CREATIV grant at INRIA and Université Paris-Saclay, and helped to illustrate how creativity support technology should explicitly aim to account for the embodied nature of creativity.



Inria

WorkeR (2019)

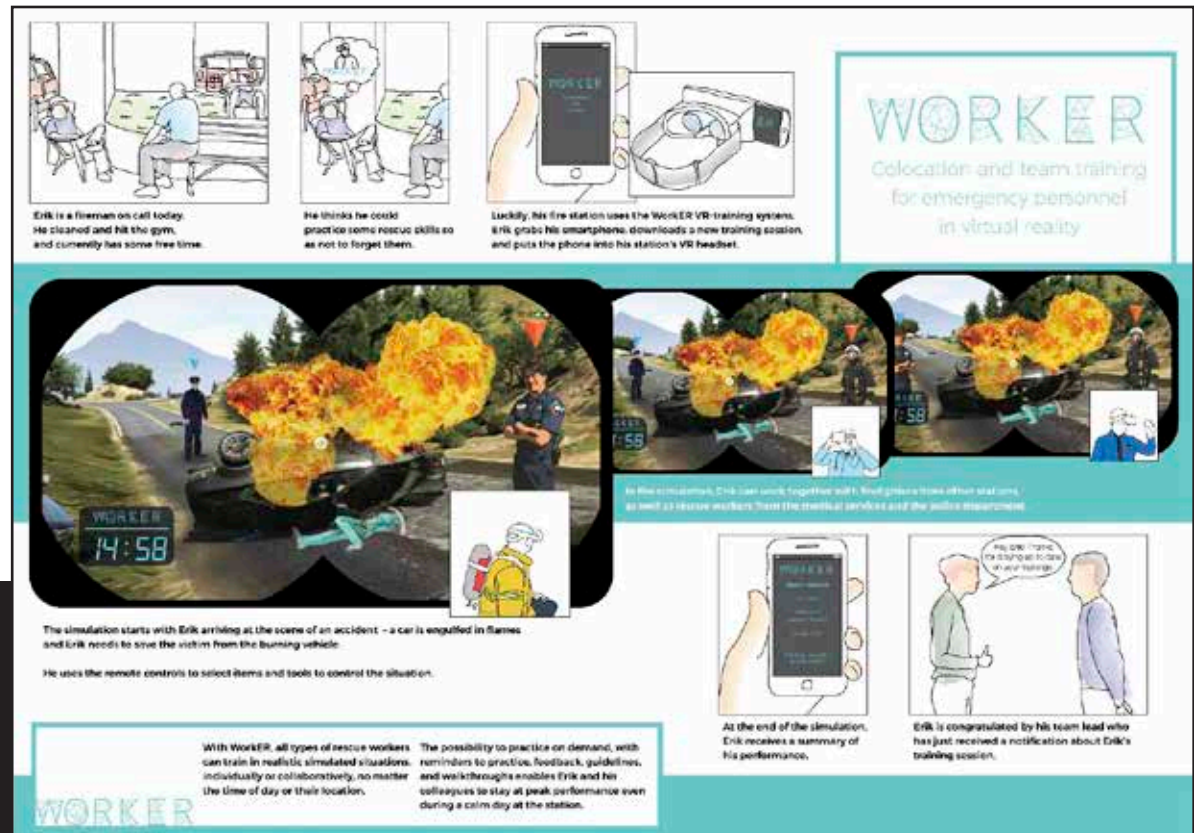
This project was conducted at the University of Twente, Enschede, The Netherlands.

In a team of 5 designers, and developers, we investigated the training methods of paramedic personnel, and made a prototype virtual reality environment for collaborative training exercises.

We began with interviews with a wide range of medical personnel: nurses, CPR instructors, professional EMTs, firefighters, policemen, and individuals who had taken first aid courses in the past.

We iterated through various ideas about how a VR training could be used effectively in the medical training sector. We eventually developed an idea centered around offering a collaborative training system for professionals (police, fire and medical), to allow them to train in VR for emergencies when teamwork is required.

We developed this prototype in the form of a storyboard which we tested with EMTs in Estonia, and the local fire department in Enschede, NL.



WORKER

Train together. Save together

Tippie (2019)

This project was conducted at EIT Budapest, in collaboration with Novopayments Hungary.

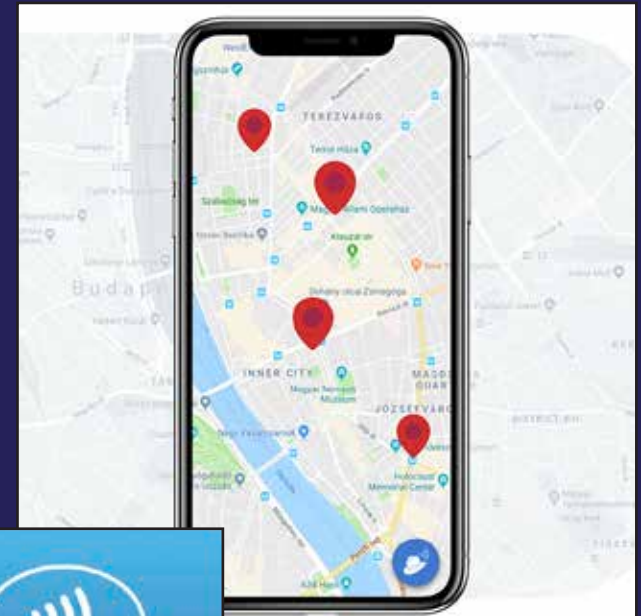
In a team of 6, we developed and prototyped a cashless payment solution for street performers and other community art events.

We interviewed local musicians and artists to develop an understanding of their problems, and to begin basing our solution in lived user experiences.

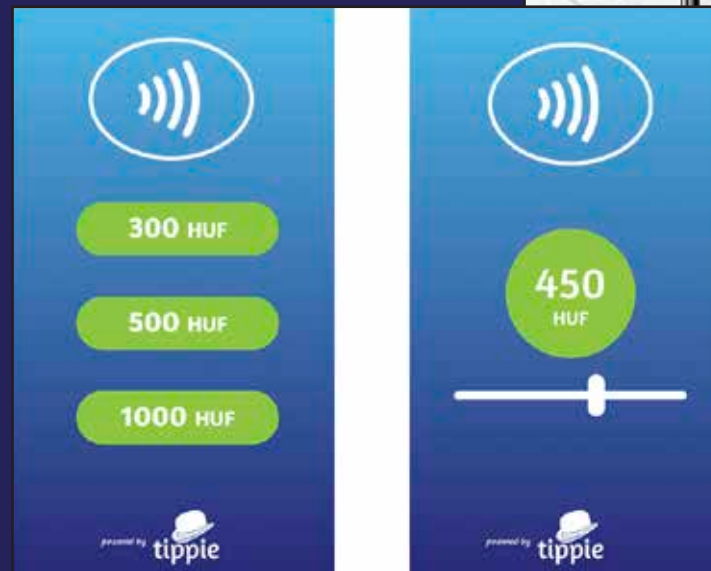
From here we generated solutions, and iterated on the design of a cashless payment solution. We developed a business plan for our market entry, and created a prototype of the software platform.

We also tested physical interface of the card reader which we brought to several local performers and event organizers for user-testing.

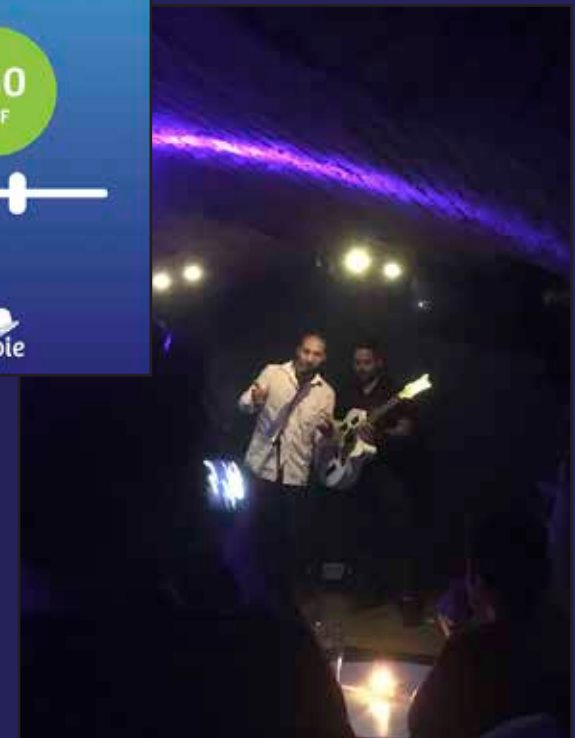
We presented our work to the local team at Novopayments and a panel of international entrepreneurs.



An early prototype



A/B app testing



Meeting with local musicians

HelpKiosk (2017)

This project was conducted in the Human-Computer Interaction lab at the University of British Columbia, in collaboration with the Samsung R&D Lab in Vancouver, Canada.

I led a research project to redesign an augmented display system to help seniors learn to use smart phones.

The system was a kiosk-type touch screen, which users could connect their phones to, and be guided through various tutorials, using the live state of their phones.

With another research assistant, I updated an older version of the application, conducted initial user testing, iterated on the design of the experience, conducted a formal usability study, and processed the interview data with thematic analysis.

The project was presented at the BC Tech Summit '18 and at the ASSETS '18 conference.

The research was conducted with funding from the AgeWell Foundation and the Designing For People initiative at UBC.



THE UNIVERSITY
OF BRITISH COLUMBIA



TerraTree (2019)

This project was presented in an exhibition at the historical graveyard in Enschede, The Netherlands

The TerraTree project was developed through a class at the University of Twente in Enschede, The Netherlands. In collaboration with the historical society and the city of Enschede, teams of five designed interactive artworks for a park the city is trying to revive, in the site of a historical graveyard.

TerraTree was a collection of three interactive boxes, that could be controlled by several people, to explore different stories of people in Enschede, specifically those buried in that graveyard.

This artwork had two main concerns: how to combine different multi-media elements in an intentional, meaningful way, and how multiple people could interact and experience the work together. Additionally, we felt strongly that the experiencing the park was at the core of this project, so the technological installation could not be too distracting, nor remove the user from being present in the park.

Blue Obsession (2017)

This project was presented in the graduation exhibition at the University of British Columbia.

This robotic sculpture was the product of a collaboration with another artist studying at the University of British Columbia. We set out to explore how humans relate to robots, how humanity is changing, and may yet change as robots become more sophisticated, and increasingly integrated with humans in terms of cyborg- and cybernetic-enhancements.

With access to a robotic arm from FESTO Robotics, we began by trying different things we could make the robot do that might have some artistic merit and serve as a catalyst for debate and thought about robots and humans.

This command based attitude was not fruitful, too based in digital logic. Thus began an exploration into what is truly human, that robots can't replace. This led us to ASMR, which is interesting in terms of how robots may play a role and infiltrate areas of human pleasure that appear to have something uniquely, supremely human.

The final product was a robotic arm, set in a gallery, that played with 'slime' infinitely.

I believe this was successful in creating dialog around robots and pleasure, yet was only a beginning of exploring these ideas.

In some ways this piece was limited in its criticality as the robot was confined to a performance for its human visitors.

video: <https://vimeo.com/249602541>

1,000 Plastic Bags or So (2018)

This project was presented in the graduation exhibition at the University of British Columbia. It was additionally selected by the University to be submitted for the BMO 1st ART! competition.

This artwork was created during a collaboration with Melt Collective, a student run recycling cooperative at the University of British Columbia.

Their mission is to reshape our perception of plastic, from waste to resource.

Over the course of 6 months, I worked with other volunteers there to brainstorm and prototype new uses for recycled plastic gathered from the university and the community.

This archway was my final project in their lab. I developed a technique of melting plastic bags, by frying them to allow molding the plastic.

I built a classical archway using this technique, in order to reference to architecture of antiquity, and imply a new direction design can and must take.

