## **Dan Turner**

Design Strategy and Product Design

2020 and beyond

### Contact

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### **Dan Turner**

I'm an award-winning design strategist and product designer with a foundation in research, storytelling, behavior and cognitive studies, and communication.

A Masters graduate of the School of Information at UC Berkeley, I have had nearly a decade of experience in human-centered design in agency, startup, academic, and civic tech settings. I have also taught design, published extensively, and worked to organize diverse and equitable professional groups internationally. Before that, I was a working journalist where I learned to observe, empathize, analyze, ask questions, and lead daily, weekly, and monthly editorial teams.

As an educator, I have taught Interaction Design at San Francisco State University (with the highest student ratings) and for MPICT.org. As a writer, I have contributed articles about design, ethics, and process to Boxes and Arrows, A List Apart, UX Magazine, and The Pastry Box Project. Community is important to me, so I have volunteered with Open Oakland, mentored at Code for America, and helped run hackathons for CITRIS, the City of Oakland, and Meeting of the Minds. I also moderate the Ethics channel for the Designer Hangout Slack, with over 10,000 active designer participants worldwide.

Whether as an independent consultant or in house, I value and promote collaboration in work, leveraging co-design principles to help gather insights across disciplines. I can help uncover the needs of stakeholders, bringing them into the design process for better results. I can work tactically while thinking strategically.

#### Key skills:

- Design and UX strategy: What do you need to make and why (and what not to make and why)
- Bringing diverse participants and thinkers together in collaboration across fields
- Uncovering emotional value propositions for the users
- Training up everyone (including myself) to think better about ethical, inclusive, and equitable design and products
- Critical thinking surprising where that can get you

And people like me. Don't take my word for it.

### Areas of expertise

- Interaction Design
- Product Design
- User Experience
- Strategy
- Editorial

- Co-design and Facilitation
- Wireframing
- Interactive Prototyping
- Mentoring and Leadership
- Sociology



### Selected work

"If you know how it works, you are not the user"

Zerobase: Free, privacy-first contact tracing empowers both individuals and communities to stop the spread of COVID-19

Potato Inc.: An open, mobile platform for neighborhood-level sharing of services and goods

Open Garden: Democratized mobile Internet access without using cellular minutes, around the world

I also have a

<u>Dribbble page</u> for more examples of interactive, service, and visual design

hOurmobile and NeighborGenie: An open, mobile platform for neighborhood-level sharing of services and goods

Clorox Professional site and TouchPoint app: Helping healthcare professionals find and stock vital supplies

Business Talent Group: Improving the efficacy and experience of placement for top-tier business consulting talent and companies

Additional projects for Fluid Inc., SNAPMapper, HIIT.fi, LaneHoney, and others

iPhone

] iP

Android

Responsive web

# Zerobase.io (Ongoing)

#### The brief:

COVID-19 is a crisis and will be for the foreseeable future. Contact tracing is one of the best tools epidemiologists and public health officials have had historically in treating epidemics and pandemics. Zerobase is a project with the goal of helping communities and individuals support and contribute to the effort while preserving privacy and avoiding increased surveillance and personal information sharing.

As of this writing, the project is three weeks old and is preparing for its first on-the-ground, real-world implementation.

#### The Team

Location: Distributed around the world

Team: Approximately 100

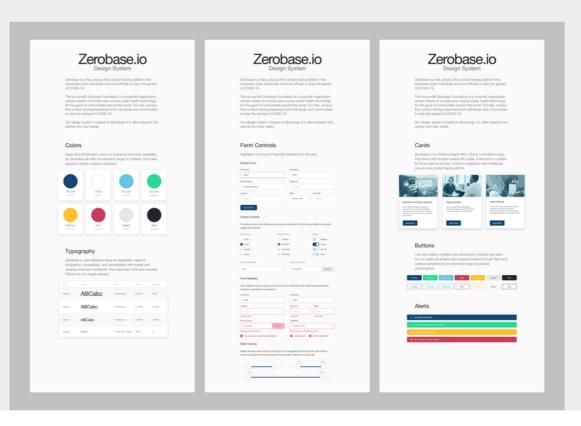
Scale: Local efforts at first, scaling to partner with agencies and governments around the world

### Role: Design Lead

- Leading project on building an iterative research and testing culture
- Building a design system
- Collaborating with legal and medical experts on privacy and access to help build best ethical practices that differentiate Zerobase from intrusive products
- Building wireframes, interaction patterns, and workflows to include a design system
- Creating an iterative process grounded in user research and usability tests
- Building collaborative communication channels for devs and designers







# Potato, Inc. (Client: Google)

#### The brief:

Note: The nature and purpose of the project remains under NDA.

Google came to Potato after two attempts to build, internally, a tool to manage a national-scale process that involved to-the-minute, critical communications and coordination between Google, clients, and diverse third parties. A chain of ownership and critical time windows required oversight, alerts, and no failures. We had 12 weeks to go from the start of research to MVP.

### The Company

Location: San Francisco, CA

Team: From 4 to 8, agile with coach

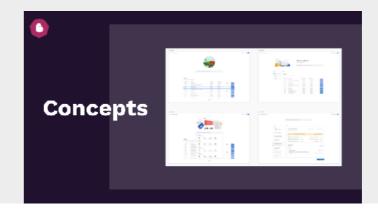
Scale: To be implemented by Google to manage a national-scale system

### **Role: Product Designer**

- · Led strategy and ideation co-design sessions
- Worked with team on research with stakeholders
- Co-led information architecture work
- Worked with design system
- Led service design and service blueprint work
- · Low- and high-fidelity prototyping
- Led usability testing
- Presented findings and deliverable (full MVP) to clients







# **Open Garden**

#### An App for the Distributed Internet

Open Garden's mission is to enable distributed, democratized internet access. With the Open Garden app, any phone can become an access point or connect to one. With the introduction of the OG crypto token, users can also earn by sharing their access.

The challenge was to move a new technology to a usable and desired consumer product. How can empower mobile phone users and help them feel safe and in control, especially when a layer of tokenization and cryptocurrency is added? The pathways between tokens and fiat currency were difficult — and the idea of cryptocurrency was often opaque and scary in itself.

### The Company

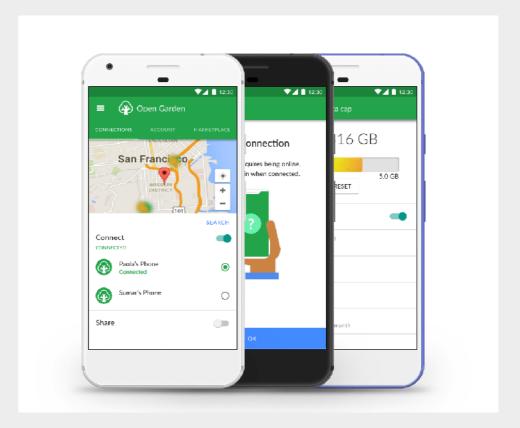
Location: Oakland, CA

Team: From 12 to 30

Scale: Locally made and tested, global in investment and distribution

### **Role: Lead Product Designer**

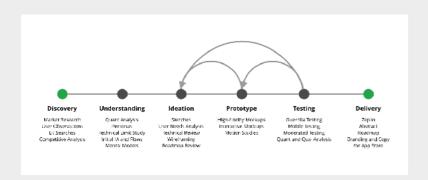
- Introduced user research, design thinking, and usability testing into the company culture and workflow
- Built information architecture, interaction flows, design systems and libraries for both Android and iOS apps
- Created low- and high-fidelity screens from prototype to final
- Designed to meet accessibility standards
- · Collaborated with founders on product strategy



Android iPhone

# **Open Garden**

### How I designed



I began the discovery phase with research into populations facing economic barriers to internet access and their experience. Sources included pewinternet.org, community outreach, meeting with local access activist groups, and one-on-one interviews.

I also looked at existing crypto apps such as Dent, Coinbase, and others to learn how these helped people exchange fiat and crypto currencies as well as how they presented the costs and values of these transactions.

There was indeed a market for "pay for what you use" internet access. But what I also discovered was that we might be designing a product for two different constituencies; the challenge was to design a product that met the language and mental models of the cryptosavvy while also being usable and not scary to those who weren't (and maybe didn't want to be).



To better collaborate with developers, I built four personas that represented the basic types of potential users of Open Garden. Keeping these posted publicly helped us keep in mind that though there might be a few users who dovetailed with what we thought was the product's value, we had to keep in mind those with differing worldviews, experiences, and goals.

Researching, building, and presenting these personas helped give us new insights into issues with the existing design and opportunities for changes. For example, we learned that people were concerned about who was sharing their access — leading us to design user-configurable and public profiles as well as increased messaging and visual indicators highlighting how our VPN kept your data private and secure.



To help with ideation, I was then able to work out the basic information architecture and feature flows, using Sketch, InVision, Principle, and LucidGraph.

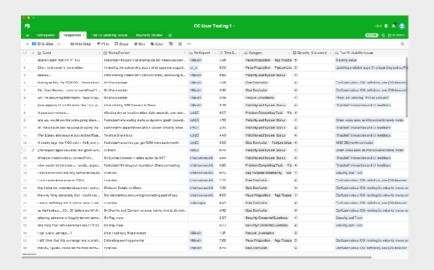
A useful exercise was to <u>build lists</u> and then create interactive prototypes. These were useful for uncovering assumptions that led to user confusion, balancing cognitive load at each step of the flow, and augmenting requirements for development.

Then I built out these features in medium- to high-fidelity screens for usability testing, both structured and guerrilla, fitting into our weekly sprint schedule.

### Android iPhone

## **Open Garden**

#### Results

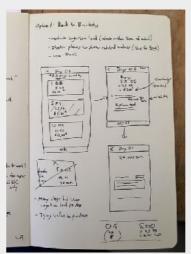


Building a regular schedule of usability testing into our sprints allowed me to flag when app-specific terms (such as "OG") appeared without context to users; learn what language was familiar and unfamiliar to which types of users; and note where our designs failed to demonstrate value to users.

Major takeaways from this included:

- Home screen should demonstrate availability of internet connectivity, and be usable without cryptocurrency
- Screens involving buying or selling cryptocurrency needed "anchor" points of value in units users understood, such as money or internet access — a major breakthrough came when test participants who had no crypto experience could see, unprompted, the value in internet access their cash would buy

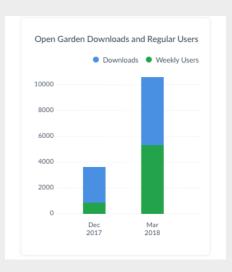




This allowed for rapid ideation, prototyping, and testing of new and needed features that had not been in the initial alpha release.

Examples of the former included: <u>integration with the TransferTo service</u> (two weeks from requirements to prototype); a data usage cap setting with user alerts; a Marketplace where users could set their own values for sharing or connecting through the Open Garden app.

Examples of the later included: backing up, saving, and exporting your wallet; <u>onboarding</u> that matches the app's revised purpose and use; careful protection in flows from unusual cases of cryptocurrency purchases and/or sales.



The delivered result was a coherent visual and information design system, with typography, colors, and placement helping users grasp information hierarchy and flow, delivered both in Zeplin and Abstract.

In the course of the redesign of the Open Garden Android app, the average review score on Google Play went up from 3.0 to 3.9]. In addition, the downloads and active weekly users went up by a factor of about five, showing that the redesign not only enticed users but kept them actually using the app.

### ] iPhone

# hOurmobile/NeighborGenie

Creating community by better matching those who can help with those who need help

#### The brief

The initial brief was to work with international timebanks to design and implement an open, mobile app they could use for their local services. (Timebank members can offer an hour of service in exchange for one timedollar, which they then exchange for an hour of another service.)

Existing web and mobile timebank apps were neither user-friendly nor context-aware. We also discovered in our data that many service requests went unmet due to these usability issues.

We set out to make an open, more user-friendly app for timebanks and to find ways to better surface needs and better match needs to those who could provide service.

As we continued work, we discovered two previously unsolved problems to tackle; none, to our knowledge, had ever been addressed before.

First, we took on how to best match local providers of services to requesters of services. Currently in testing as the NeighborGenie app.

Second, we took on the two-way exchange problem of matching those who needed a ride with those who could provide a ride (in dedicated ride services, the drivers have no needs other than waiting to pick up people). We saw from timebank data that this was the most requested service by most timebank populations, which were largely older, less wealthy, less tech people. So this TransitShare feature presented a unique interaction and matching problem.

#### The Team

Victoria Bellotti, Xerox PARC (Principal Investigator)

John Carroll, Director, Center for Human-Computer Interaction, Penn State University

Ben Hanrahan, Assistant Professor, Penn State University

Dan Turner, Xerox PARC

Anind Dey, Director, HCI Institute at Carnegie Mellon University

Alaaeddine Yousfi and Afsaneh Doryab, Carnegie Mellon Univeristy

Alex Ambard, Christina Gossmann, Kamila Demková

Stephanie Snipes, UC Berkeley School of Information

#### What I did

Qualitative and quantitative research and analysis, competitive analysis, expert evaluation, feature ideation, information architecture, wireframing, prototyping, interface design, usability testing. paired final visual design

### Key tools and deliverables

- · Google Sheets for quantitative user research analysis
- Cacoo for collaborative sketching/wireframing
- OmniGraffle for IA and interaction flow diagrams
- Sketch for high-fidelity and final screens
- InVision for interactive prototyping
- Principle for interactive interface animations

#### Results

The focal (or, as we sometimes call them, "never been done before") features — advanced semantic matching and two-way ridematching — are currently in field testing through teams at Penn State and CMU.

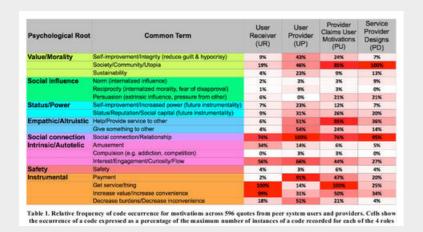
The basic research this project has generated includes a study on motivations in the sharing economy (award-winning CHI 2015 paper, "A Muddle of Models of Motivation for Using Peer-to-Peer Economy Systems"), and a new and algorithmic matching system ("'MASTerful' Matchmaking in Service Transactions: Inferred Abilities, Needs and Interests versus Activity Histories") for services.

This project is partnered with timebanks across the United States and is planning an app rollout in fall 2017.



# hOurmobile/NeighborGenie

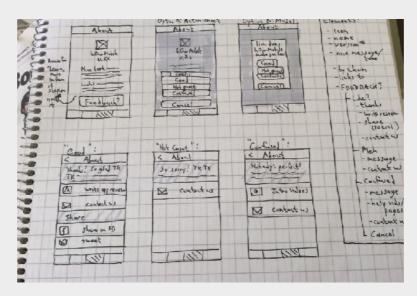
### How we designed



We assumed altruism and idealism would be a prime motivator in the sharing economy, but our studies surprised us.

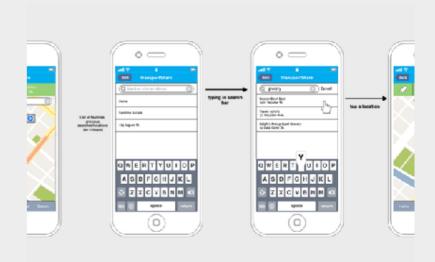
We conducted over a hundred semi-structured qualitative interviews around sharing experiences and motivations. We then, using grounded theory frameworks, analyzed the interview contents and built quantitative data from this. What the data showed was that providers (and we) were wrong about user motivations: users were most driven by material concerns. More at <u>Shareable</u>.

What this meant for our design process was that we had to abandon more idealistic messaging and focus instead on "get the thing/service" interaction flows, much as we would on a fully commercial project.



I began building the app through <u>listing</u> and sketching, based on the interaction flows I'd previously mapped out. This allowed me to develop categories for the interaction patterns I'd need to build and how to scope them.

Another practical benefit from taking this step was that it showed us, in a tangible way but at a lightweight investment, that the onboarding process proposed by the development team would be too burdensome — take too many steps — for our population, which was more elderly and less tech-savvy than the general population. I was able to streamline the process and offload some of the option screens, all before any code was committed.



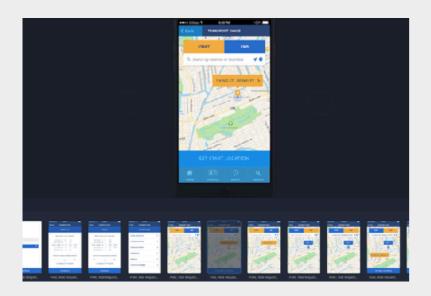
Using the collaborative wireframing tool Cacoo, I was able to start building low-fidelity wireframes and interaction flows. This showed us in more concrete terms how interactive steps would feel and gave us more insight into what each action would ask in terms of cognitive and memory load.

This also allowed me to test color and contrast combinations for accessibility.



# hOurmobile/NeighborGenie

### How we designed



Working with a visual designer, I built the interaction and design patterns for the entire app, with accessibility in mind.

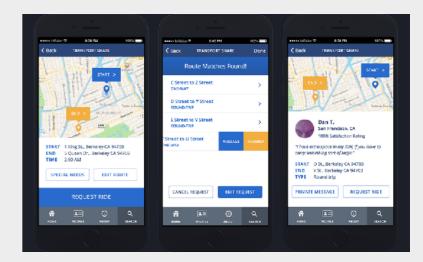
Working in InVision, I built all the screens and controls (hewing to iOS Interface Guidelines, as our research showed our population was mostly on iOS) to test and iterate the entire application interaction flow — over 140 screens.

This allowed to conduct guerrilla tests (with some interesting ethical implications) to iterate the interaction flow and some design components.



Using Principle, I experimented with <u>animations</u>, to see what would add to the accessibility of the interface — motion to attract the eye to highlight a state change or new information.

These animations also helped us later, to augment requirement documentations for our developers.



Features of the app are in separate testing — hOurmobile for the ridesharing, NeighborGenie for the algorithmic maching — through projects at Penn State and CMU. Preliminary results are promising; I look forward to being able to see the final product integrate the design and development work.

iPhone iPad Responsive web

## Clorox Professional Site and TouchPoint App

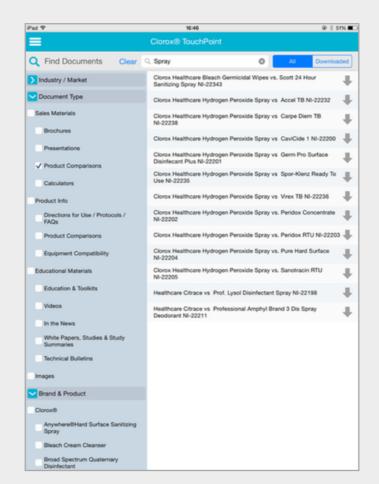
### **Building New Abilities for Web and App Users**

As a consultant, I designed and conducted the user research, structured the IA, and proposed, designed, and tested new functionality for <u>cloroxprofessional.com</u>'s Healthcare site, increasing usability for customers (infection preventionists and environmental service professionals at hospitals) and improving sales.

The new functionality tested so well, the company extended our contract and I designed the TouchPoint tablet app to meet the needs of Clorox's field reps; this app, built around the successful features we developed for the site, allows Clorox field reps to easily collect and present product info to commercial buyers, increasing sales by over 10% and reducing sales meeting times by over 15%.



https://www.cloroxprofessional.com/industry/health/product-solutions/

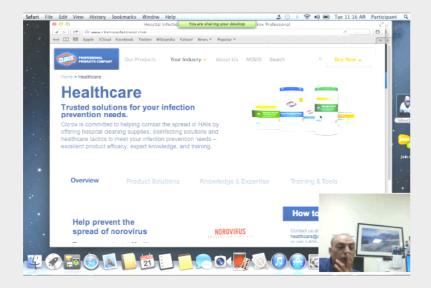


Mockup for Clorox's TouchPoint tablet app

iPhone iPad Responsive web

## Clorox Professional Site and TouchPoint App

### How I designed the Clorox Professional site



I began with usability testing of the existing site, to discover what problems users were facing in location, comparing, and collecting the data they needed for their purchasing decisions. This turned out to be crucial: surprisingly, many users did not scroll down or want to navigate the existing product family hierarchies (note the user's expression above).

These repeated frustrations, plus information gleaned from interviews, showed that users thought in terms of where in the hospital needed cleaning, what viruses and bacteria they needed to kill, and form of product. The existing site design was failing them.



This preserved most of the existing site infrastructure, keeping what the site owners and users were familiar with.

The new feature allowed users to compare kill rates, pricing, and other features of products within the same page; our testing had shown most users did not open new tabs for products.

Based on the success of the faceted browsing feature, we were able to move forward with the TouchPoint app to address another problem for our client: how field reps could find, collect, and share heterogeneous information (prices, specs, videos, CDC white papers, etc.) on products with customers.

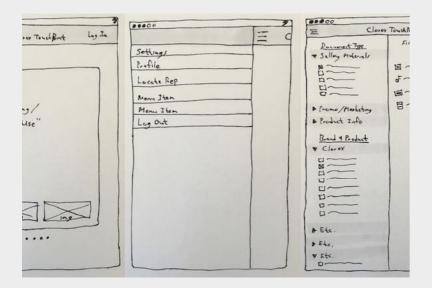
iPhone

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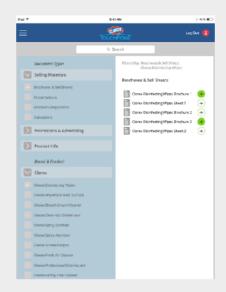
Responsive web

# Clorox Professional Site and TouchPoint App

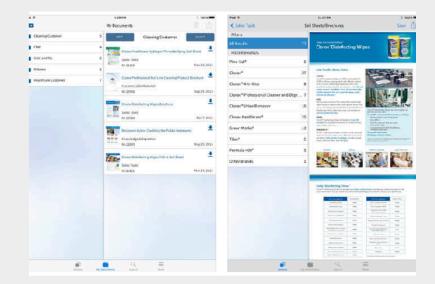
### How I designed the TouchPoint app



With the user research sorted, and a clear user need and use case (field reps needing to collate diverse product information to present to buyers), I built the information architecture and user flow, starting with rough sketches for ease of idea generation and iteration. The faceted browsing feature I'd previously developed was a powerful base; the next step, I discovered, was to solve how the field rep could save per-product info.



Working with the backend developers on the project, we prototyped ways to build a portfolio/suitcase metaphor: reps could collect various media and info into one portfolio per product or proposal. I validated this through stakeholder and user (field rep) interviews; these also uncovered that sometimes reps wanted to be able to compress and email these product portfolios, which was a feature we could add thanks to the tablets being connected devices.



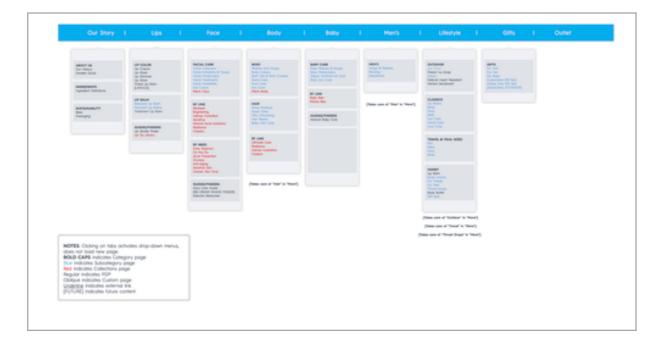
The app is still in active development and distribution in the iTunes Store (though use requires an approved Clorox sales email address), with a 4+ rating.

(Note that the above is from a version I did not work on, that received an internal visual refresh. Functionality appears to be the same, but I cannot confirm, as I do not have access to the app any more — at some point you have to let go of your children.)

iPhone iPad Responsive web

# **Additional projects**

Other paid projects, public good projects, and just projects



#### NDA Client for Fluid Inc.

As a contractor, I studied the consumer habits of the client company's users, built cognitive models on how customers organized the company products, and redesigned the information architecture for the client web site.

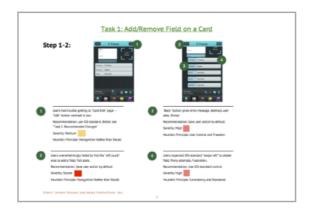
After the changes, the company saw significantly decreased site abandonment and increased engagement (more products viewed, more information requested).



### **SNAPMapper**

Second Place at Alameda County Civic Hackathon

I built SNAPMapper using responsive web tools, to help CalFresh users locate and rate stores that accept their EBT cards while providing fresh and healthy food. Later adapted by Code For America.



#### **Heuristic Evaluation**

I conducted the evaluation based on the developer's tight time frame and limited programming resources. The goal was to find, within a week, top trouble spots to address for the next revision; after changes, reviews for the app improved.

iPhone

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Responsive web

# **Additional projects**

Other paid projects, public good projects, and just projects



### Voter Advice Application at HIIT.fi

As a visiting researcher at Helsinki's HIIT, I joined a team working on creating mobile voting advice applications for emerging democracies in Africa. I researched how citizens in various countries got information online, privacy and sharing issues, how some colors were politically charged, how to provide dense data and questions over WEP-enabled phones without incurring high data rates for the users. I also organized co-design sessions with native voters and built prototypes for testing.



### DesignerHangout.co

I joined this team early and still moderate the Ethics channel, even as the Designer Hangout Slack has grown to over 10,000 designers across the globe.

I also organized and hosted our San Francisco-based Meetup.



### LaneHoney

I helped the company founder redesign the startup's homepage and basic interaction. Up to speed on new domain knowledge in less than a day.

# Enough about me. What do they think of me?

For more of this sort of thing, there's my LinkedIn page.



"Dan has been working for me for almost three years now on an NSF-funded research project to develop smart, context-aware support for promoting peer-to-peer service transactions (within the sharing economy). He's been working as both a UX researcher and interaction design lead in a large distributed team and has been a fantastic collaborator that everyone gets on with. Dan is hardworking, diligent, self-directed and creative and very knowledgeable about all aspects of user experience design, particularly crafting usable and efficient interaction designs. His background in journalism makes him an excellent communicator and writer. And he is also fearless about learning new skills and mastering additional tools." – Victoria Bellotti, Research Fellow, Xerox PARC



"Dan jumped in with only short notice on a deadline-drive project and was rapid, reliable, and creative with wireframes that needed to be done right away. He was responsive to client needs and even anticipated some, designing some new and effective ideas from scratch." –Stephen Ruiz, Director of User Experience, Dogtown Media



"Dan is a taxonomy and metadata master. We threw him into a project with unfamiliar products and he became a subject matter expert in a really short time. He also did a spot on site architecture and proposed interaction ideas for the design phase of the project. Dan has a great sense of humor that enhanced the working process. I enjoyed working with him and would do so again." –Allyson Hollingsworth, Design Practice Lead, Fluid



"Daniel was able to analyze our UX/UI needs immediately and offered up creative insights that helped us better understand the task ahead of us in redesigning the user interface and enhancing the user experience of our site. I highly recommend him for his deep knowledge of user experience and his ability to distill issues and guide the non-expert to potential solutions." – Daniel Marks, Entrepreneur/Media and Technology



"Dan is one of the smartest, most focused and most skilled tech writers I've ever worked with – or encountered. I edited his stories at MacWeek.com and always knew they'd arrive on time, complete and error-free, no matter how obtuse the tech subject. And his stories were clear and direct, which made him invaluable. Dan's also a friendly guy. It was a pleasure to work with him, and I hope I get that chance again some day in the future. I recommend him highly." – John Batteiger, Deputy Managing Editor, New York Times News Service



"I taught Dan in my User Interface Design & Development class. He was an excellent student, always asking good questions, and clearly interested and motivated to learn the material. I am happy to endorse his work, especially in the areas of UI/HCI." – Jeffry Nichols, Researcher, Google



"He's one of the people in this field whom I don't hate." – Dylan Wilbanks, Founder and Principal, Hêtre Design

## A few final words

It'll be brief, I promise. You have water and a snack, right?

Thank you so much for reading this through, at least to this point. I look forward to any and all questions, feedback, and comments.

I'm so glad to have found this field. After years of being a journalist, which I still value, it was time for me to learn and do something new. I started by lining up informational interviews with people who were, to me, doing interesting work. I asked them what they really do all day, what they care about, what drives them, what they find challenging about their work, their journey to this point, and where they hope to go to next. People were amazingly generous with their time and thoughts.

Eventually, one led me to UX (or, as it was called at the time, experience design). This led me to the School of Information at UC Berkeley, where the interdisciplinary program was a great fit, with great teachers and also great classmates.

The field of UX dovetails well with what I cared about and what drove me in journalism: learning about real people and real problems, and seeing what can be done that matches their world and helps. And so many of the skills carry over, such as open-ended questioning, critical thinking, and empathy.

I hope to keep working with people who are similarly passionate about learning about others, from each other, and how we can, as much as possible, co-design services, products, and processes that meet real needs and solve real problems.

Again, thanks for reading. Let's talk soon!

### **Currently Reading**

- Zeno's Conscience by Svevo
- Superforecasting by Tetlock and Gardner
- Fire Shut Up in My Bones by Blow
- Fourth World Omnibus by Kirby
- · The Attention Merchants by Wu
- New Yorker back issues
- Twitter and Tear Gas by Tufekci

### **Recently Read**

- · White Tears by Kunzru
- Humble Inquiry by Schein
- Org Design for Design Orgs by Merholz and Skinner
- Design, When Everybody Designs by Manzini
- Geek Heresy by Toyama
- Yowamushi Pedal

- Well Designed by Kolko
- The Underground Railroad by Whitehead
- The Hunt for Vulcan by Levenson
- I Hate the Internet by Kobek
- A Manual for Cleaning Women by Berlin
- UX for Lean Startups by Klein
- Lean UX by Gothelf and Seiden

### Doing

- Sketching
- · Racing my bike
- Mentoring at bike races
- Learning three-string guitar
- Talking comics and podcasts
- · Talking in front of crowds
- · Reading, apparently

# Thank you

### Contact

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