

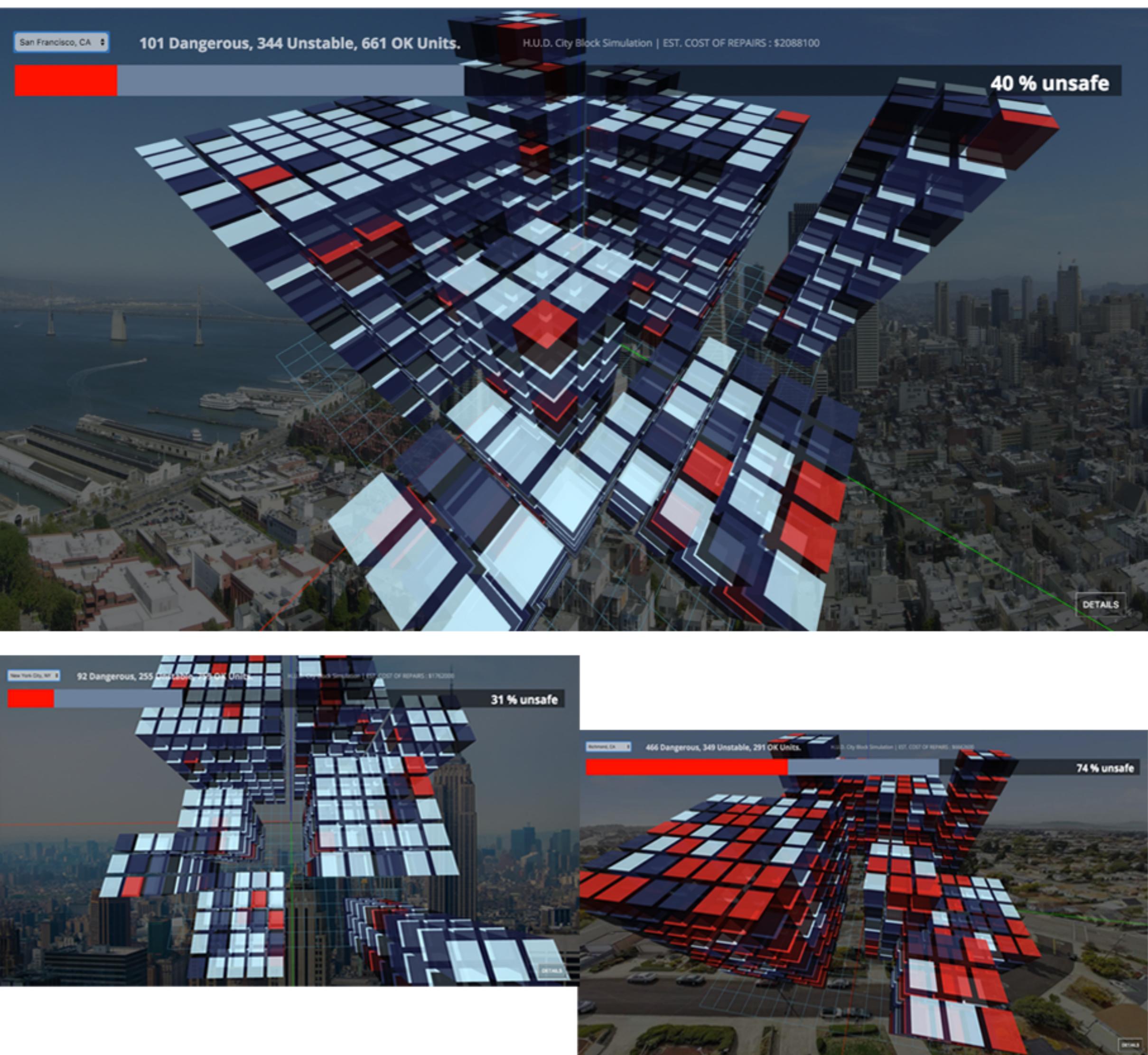


KATHERINA NGUYEN PORTFOLIO
2016

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H.U.D PUBLIC HOUSING SIMULATION

JAN. 2016



3D Public Housing Safety Data Visualization

Drawing from open datasets from the US Department of Housing and Urban Development, this prototype visualizes the safety scores of public housing as a simulated city block of building units with varying levels of risk. Sample cities in CA, MA, and NY are used to show how safety scores translate when projected as concrete models that can be more persuasively presented and engaged with. Each simulated scene is accompanied by details on the range of the safety scores compared to state averages as well as a snapshot of the city's general public housing score landscape.

This project was created using Python and light SQL filtering (data prep), CSS, JS, Jquery, and 3JS (data visualization / modeling). Next steps : Fine-tuning the risk modeling and weighed probabilities, opening this up as a visualization template to help non-profits or individuals in petitions for more H.U.D. public housing support.

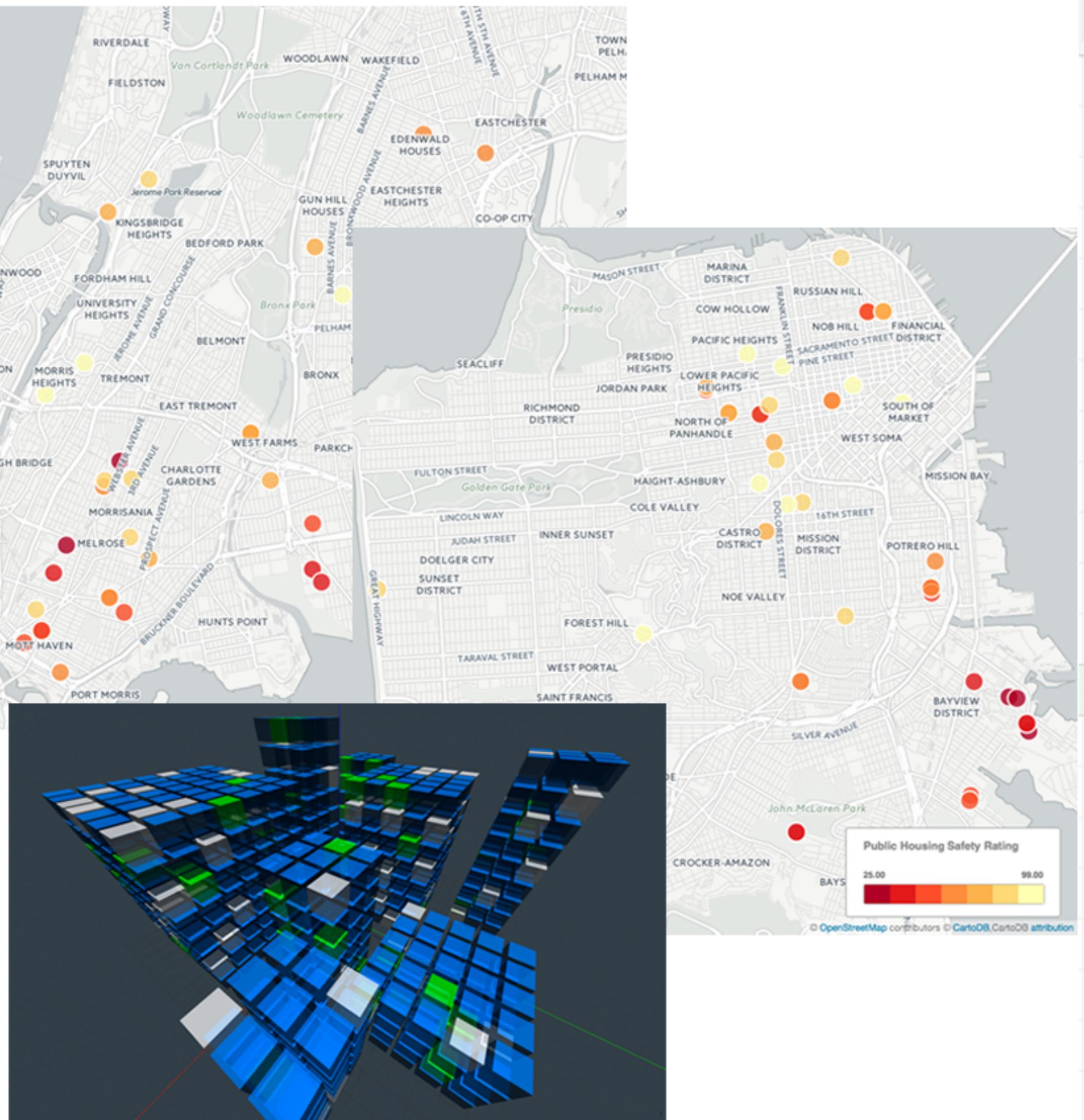
See prototype here :

<http://katherinanguyen.com/HUDpublichousing.html>



H.U.D PUBLIC HOUSING SIMULATION

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Snapshot of HUD data spreadsheet. Geo-location points mapped using CartoDB. Full map here:
https://kathnn89.cartodb.com/viz/2c7f18ca-c5d3-11e5-97a5-0e98b61680bf/public_map

field_1 - string	field_2 - number	field_3 - number	field_4 - number	field_5 - string
Richmond	25	-122.357109	37.939789	CA
Richmond	26	-122.357109	37.939789	CA
San Francisco	40	-122.380784	37.735651	CA
San Francisco	42	-122.379165	37.735414	CA
San Francisco	43	-122.376795	37.73019	CA
San Francisco	45	-122.430719	37.78051	CA
Richmond	46	-122.335605	37.924554	CA
San Francisco	48	-122.423456	37.714177	CA
Richmond	50	-122.335605	37.924554	CA
San Francisco	50	-122.396422	37.75296	CA
San Francisco	50	-122.377186	37.731448	CA
San Francisco	54	-122.423456	37.714177	CA
Richmond	56	-122.3704	37.957465	CA
Richmond	56	-122.3704	37.957465	CA
Pittsburg	57	-121.873594	38.016569	CA
San Francisco	57	-122.387792	37.738075	CA
San Francisco	57	-122.377186	37.731448	CA
Richmond	58	-122.3704	37.957465	CA
Richmond	59	-122.345755	37.936489	CA
Richmond	59	-122.359411	37.946744	CA
Richmond	59	-122.345755	37.936489	CA



360° Immersive Sentiment Data Environment

Recent personal projects to experiment with a more immersive form of data visualization and creative applications for mapping social media sentiment. Geo-data from Twitter posts with specific mentions of prayers for peace (Hope Atlas) and holiday wishes (Snow Globe) is mapped as animated data environments that the user can navigate in all directions.

See prototypes here :

http://katherinanguyen.com/brightthoughts_fireflies.html

http://katherinanguyen.com/brightthoughts_snowglobe.html

BRIGHT THOUGHTS : HOPE ATLAS & HOLIDAY GLOBE

C. 2015



#prayforpeace

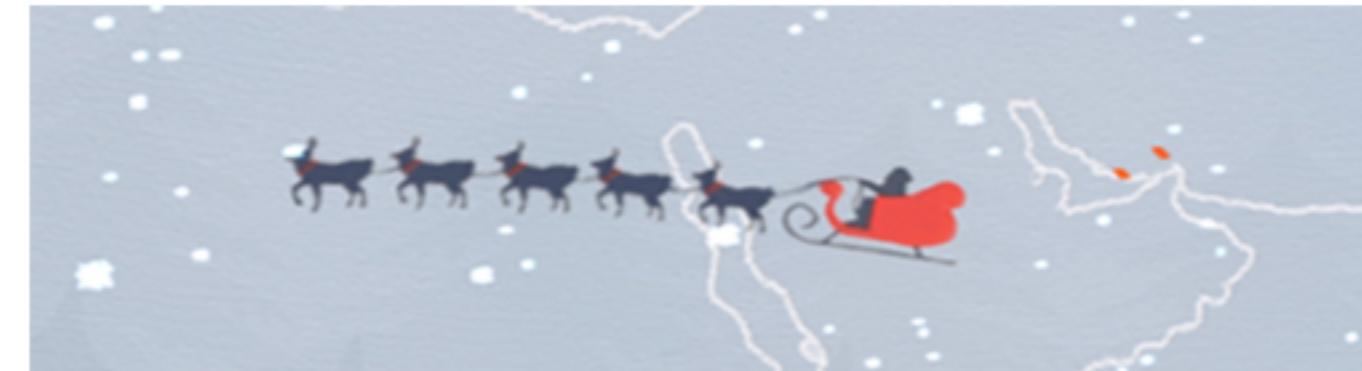
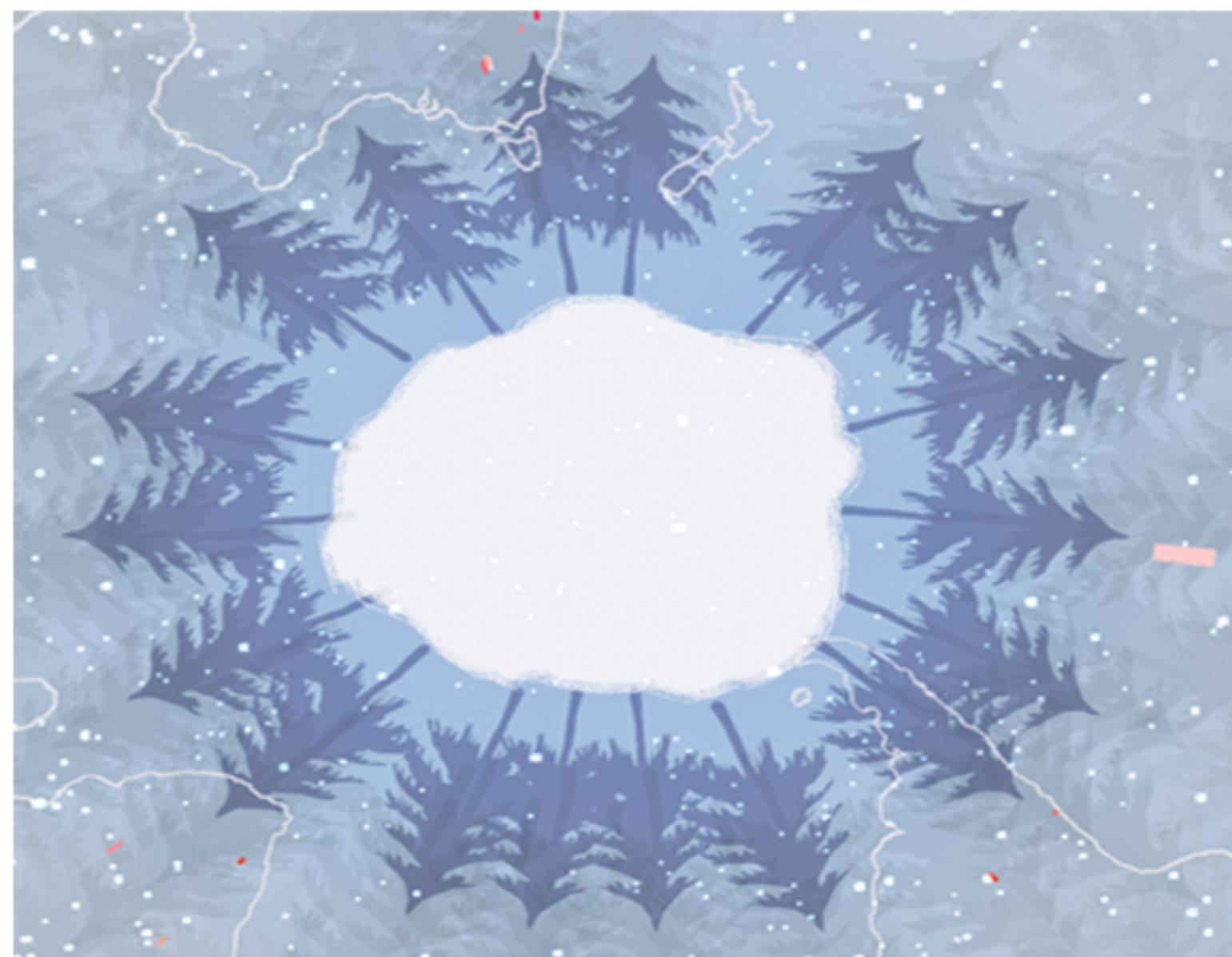
Each point on the globe represents a deconstructed social media post distilled to its purest intent of hope and solidarity.

Data here is presented as a footprint of sentiment, which seen collectively creates a compelling overall ambience while still being grounded in a foundation of measureable reality.

[["PEACE&PRAYER", [53.22174135, -6.5647737500000005, "I feel the pain of the world, in every cell in every chakra, even my eyes hurt. Please there can be peace. Transmitting #Love to You.", 51.2160253, -1.3792345, "2016 se inicia e eu j\u00e1 querer descer desse mundo \ud83d\ude11 #prayforpeace ", 44.746673, 93.2024385, "Peace love and equality", 55.858302699999996, 4.241751349999995, "@Just_Katie_x is no peace with bombs", 53.22174135, -6.5647737500000005, " RT @biz_eMom: Mother Teresa's Humility List:\n#newyearsresolution \n\n#YearofMercy\n#Catholic \n#PrayForPeace https://t.co/maDC02FVwS ", 51.2160253, -1.3792345, " Work it out \n\n#hyattregency #hyattregencyyogyakarta #indonesia #silent #silence #PrayForPeace\u2026 https://t.co/GhpD4kwJld ", 44.746673, 93.2024385, " Italia-Romania\u26bd\ud83c\uddee\ud83c\uddf9\ufe0f\ud83d\ude4f\ud83c\udde\ud83c\uddf7\n#Italy #France #PrayForParis #NOWAR #PrayForPeace \n@Florenzi @azzurri https://t.co/zqhg5vHal1 ", 32.67820 , 83.1738665, " Queremos recordar nuestros or\u00edgenes: dar a conocer la vida de los primeros seguidores de Cristo y difundir su ejemplo en el mundo de hoy. #WeAreChristians ", 54.91379715, 7.8665568, "Start by making peace with yourself https://t.co/vwBLXZzzr1", 38.8051145, 77.2369685, "can we all just coexist in peace plz", 53.4569527, 2.23348, "Loved this, share the #love #peace https://t.co/fPC8lbE3mu", 41.833584450000004, 87.732013, "This is my wish...let there be peace on Earth...\n\nhttps://t.co/CKrc0i1zV1", 36.3001, 86.6061, "Quiet nights at home are rare. But I treasure these so much. Praying for #peace throughout our\u2026 https://t.co/o2TdkhK0sA", 29.8384948, 95.44648649999999, " RT @Cimorelliband: #PrayforParis We are all Gods children. #PrayForPeace ", -33.887811, -18.5536596, "@Ngiobelle @LoveSkinSA pain free, good rest and peace of mind until the next pain", 25.825643499999998, 80.3691531, "Why cant we all just live in peace", -33.84824400225, -150.9319747999998, "#jesuisworld DelYesjes: RT Cannelle00: L'homme a fait de ce monde un enfer \n#PrayForPeace \n#PrayForWorld https://t.co/0X93mzvpHo ", 34.0207895, 118.4119065, " THE NUMBERS ARE IN. MORE THAN 55,000 PEOPLE KILLED IN #SYRIA IN 2015. PLZ #PrayForPeace https://t.co/AiNnlFchVm ", 36.221709000000004, 86.520209, "#namaste #hakunamatata #prayforpeace #traininsaiyan #smokevitaminslikemarley #meditate #noh8\u2026 https://t.co/MQEg773Nf9 ", 19.17414005, -72.87472489999999, "And these guys wants to preach peace to other nations https://t.co/niqdNVS4H2", 33.54179133, 117.78369091, "Perfect day to send my grandmother's ashes back to the earth. Go in peace Graham free in the sea\u2026 https://t.co/ZfDWC0L9Dg", 32.8100122, 117.10498915, " When Paris turned out its lights, the rest of the world turned them on.\n\n#ParisAttacks #PrayForPeace ", 36.3001, 86.6061, "#prayforpeace #god bless pathankot #saluteoursoldiers #fightbackhard ", 29.8384948, 95.44648649999999, " RT @Habibies: 2016 will be more bloody than 2015. #PrayForPeace ", -33.887811, -18.55365 , " One of the saddest pictures i've ever seen. #StopTheWar #prayforpeace https://t.co/qi9xUsdgDg ", 25.825643499999998, 80.3691531, "Why cant we all just live in peace.", 14.5675261, -121.01720885, "bbl lads peace out x", 30.323345699999997, 97.75472415, "#SanBernadino prayer now needed for the families and their loved ones :(PEACE needed all over the world", 34.0207895, 118.4119065, "GUN violence isn't the problem. It's violence. Just violence. Nothing more. Be safe y'all. Love and peace...\ud83d\udc99", 35.962259, 95.8778875, " All I see on the news is shootings in Lexington. I'm glad I moved. #PrayForPeace ", 46.22305556, -6.13305556, " Um. Wtf, world? #PrayForPeace ", 35.209058999999996, 80.8467855, " A look back at 7 #humanitarian crises in 2015. #PrayforPeace this #NewYear. https://t.co/0ERYDGqtf9 https://t.co/AnSZiurv6r ", 36.0609645, 115.1351649, "But i thought its the Religion of peace.... https://t.co/rzYBk9oG0f", 46.22305556, -6.1330555 " As we enter 'New Year', #Biafrans Pray for New & Honest change in Global Dept.of #Freedom #Justice #Truth & #Peace\n#FreeBi\u2026 ", -29.6163998, -30.3537815, " Praise the Lord....and don't you \"pass that ammunition.\" Pray for peace. https://t.co/UKHfVKjukX ", 49.288236, 123.0725150000001, "If you have everything the world can give but lack of peace of mind, you can never happy.", 38.997935999999996, 105.5508905, "@tomchaplin Nobody cares about peace since December 1980? Nobody. That's what you're saying, and you are simply wrong.", 23.8445529, -86.55771175000001, "@Abbaskhanz nd be it a muslim or a hindu citizen of India.. its der country.. nd dey r all equal..lrn to live in peace man..", -23.682803, 46.5955455, "While I may be hard to find, heard there's peace just on the other side....", 51.90230165, 0.1909515, "A very Happy Christmas to all.Peace and Joy to all in 2016", 38.89860285, 77.0143985, "Today I am reflecting on... If it is possible, as far as it depends on you, live at peace with everyone.\u201d Romans 12:18", -14.239565299999999, 53.184834, "@KremlinRussia_E A lot of peace for you//////// My studies.-- ----http://www.flogao.com.br/geraldoler/146470937", 41.762316999999996 72.7502315, "@KristinStoller So grateful for your coverage and sharing news of the mandala. Wishing you peace this day and every day. - Angela", 24.99346225, -55.55117235, "Seems we are heading towards #WorldWar3.\n#Make #Peace, these #world #leaders have gone nuts https://t.co/aGDS6DldGJ", 38.985413, 88.1755704999999, "Peace on earth. Goodwill to men. https://t.co/hByiPm6KrQ", 34.99039078, -134.5381012, "Thanks for the reminder, Al\u2764\ufe0f Rest in Peace Alex Hope Erickson @\u2026 https://t.co/ETZdo3XWx", 33.7473297, 117.867897, "Peace yow! \u270c\ud83c\udffb\u270c\ud83c\udffb\u270c\ud83c\udffb#vainglorygame #vaingloryfinals @GodsEyeTV @ Little\u2026 https://t.co/jHHHIRbne , 38.653749000000005, 90.247798, "@PapaESoCo peace and thanks. #TweetOn Amigo- We can change the World!", 30.20607895, 92.0611765, "God may her soul rest in peace \ud83d\ude18", 40.0048655, 75.117998, "Rest in peace to all my niggas, free all my niggas", 54.51607252, 7.88690934 "\u201dSerenity is not freedom from the storm, but peace amid the storm\u201d - Author Unknown #100happydays\u2026 https://t.co/CsGSku5gw7", 16.90266795, -42.6367228, "Because of #War_Criminal_Putin all Muslims will have the right to Attack Russia. For Russian peace Russian should stop Putin crimes", 19.0322295, 98.1542665, "The Face of Peace, Pablo Picasso https://t.co/qSNfL4SULE", 30.7060885, 95.54726925, "Thank you @fatbellybella for allowing me to receive great advice from the #AskBadu videos. \ud83d\ude01\ud83d\ude4c\ud83c\udffe\ud83d\ude0f \n#Peace #Serenity", 41.1179365, 77.6046839999999, "Say a prayer for peace", 40.8503475, 73.8494415, "sometimes the good ones go too soon, rest in peace aunt jen\u2764\ufe0f", 34.0207895, 118.4119065, "@LicensedTo_Show @SimonMaeder @TopeMikun @AdamElHagar thanks for raising money for MCA's charity. Give. #thanks #grateful #peace # love", 35.3090465, 98.71699, "Today, we are at war & people are seeking protection. Everyone has given up on peace. #JohnLennon", 34.0628185, -72.0987444, "#HeartofAsia in Pakistan should result for sustaining peace in #Afghanistan; no terms of good & bad Taliban", 53.0966571, 2.0375511, "@qvcuk burning winter glow in my new peace hope and joy votive holders gorgeous love Rosexx https://t.co/szEAptgCVV", 47.6149382, 122.3306024, "As #prejudice against #Muslims rises, we can learn from a country in #Africa where #Muslims and #Christians live in #peace. #Eritrea.", 48.82392210000004, -2.2626814, "@Kvin_Krewyo gg! C'est mon prochain aussi normalement, il se bat avec le demo", 38.89860285, 77.0143985, "Rabbi Susan Talve: We stand for security for Israelis & justice for Palestinians and a lasting peace. At @WhiteHouse", 40.780709, 73.9685415, "Let it be World Peace sooner than soon..... https://t.co/mvTWITPTHe", -22.77331927, 41.90625067, "Peace Day never came ; ;", 40.6252755, 75.3671962999999, "Sometimes the fastest road to peace is straight through the middle of conflict.", 33.4128725, 112.4249755, "\u201dPeace of mind Wednesday's\" \ud83d\ude02", -16.2833935, 63.547328 , "Un a\u00f1o mas de vida, Gracias vida, Gracias DEUS aun respirando en este hermoso mundo Bendici\u00f3n. peace and love. el sonido continuara @Insanomc", -4.0333775, -21.75380849999998, "We have to talk..Nous sommes africains lorsque il y a des probl\u00e8mes, la famille doit se rassembler et parler.#Dialogue#RDC\"to solola#Peace", 26.682504, 80.0392612999999, "Our halls are decked and even our historic fountain is festive for the holidays... https://t.co/cqqiUQis2T", 30.26047454999998, -76.41070425, "But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness \ud83d\ude4f\ud83c\udffb\ud83d\udcab\ud83c\udf37\ud83c\udf1f\ud83c\udf37\ud83c\udf41\ud83c\udf38\u2728", 30.26047454999998, -76.41070425, "But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness \ud83d\ude4f\ud83c\udffb\ud83d\udcab\ud83c\udf37\ud83c\udf1f\ud83c\udf37\ud83c\udf41\ud83c\udf38\u2728", 33.98079110000005, -71.5419311500001, "Good step for peace .not what will be do jumat islami ??? About #jihad \n#Pakistan_controlledKashmir", 29.8384948, 95.44648649999999, "Problem Muslims have between Peaceful & Jihadist is their Holy Book has verses for each to choose either Violence o Peace @greta", 2.5693653, -101.8586419000001, "What was the last thing on their mind?hopelessness?fear?anger?peace?", 41.83358445000004, 55.54726925, "We are at war & people are seeking protection. Everyone has given up on peace. #JohnLennon", 34.0628185, -72.0987444, "#HeartofAsia in Pakistan should result for sustaining peace in #Afghanistan; no terms of good & bad Taliban", 53.0966571, 2.0375511, "@qvcuk burning winter glow in my new peace hope and joy votive holders gorgeous love Rosexx https://t.co/szEAptgCVV", 47.6149382, 122.3306024, "As #prejudice against #Muslims rises, we can learn from a country in #Africa where #Muslims and #Christians live in #peace. #Eritrea.", 48.82392210000004, -2.2626814, "@Kvin_Krewyo gg! 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BRIGHT THOUGHTS : HOPE ATLAS & HOLIDAY GLOBE

DEC. 2015



10,000+ filtered posts were collected from the Twitter Public Search API over the course of December 2015. This pool was then narrowed down to ~1000 posts with available geo-location data that could be mapped into the 3D Data Visualization globe, then further limited to reduce performance lag when rendering the points.

Further work will include international tweet support and improving rendering performance speed.

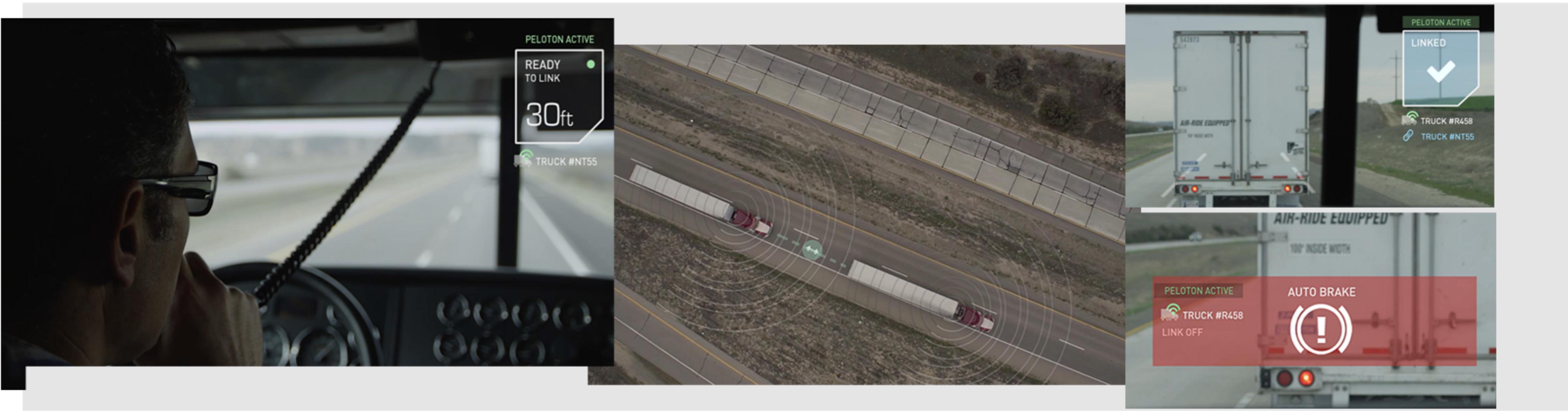
Both projects created using Python (data collection, cleaning, and conversion to JSON) and 3JS, CSS, and Javascript for the design presentation.

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  "text": "Merry Christmas to everyone. Remember family not Gifts is what the holidays are for.",  
  "is_quote_status": false,  
  "in_reply_to_status_id": null,  
  "id": 680409040715956224,  
  "favorite_count": 0,  
  "source": "<a href=\"http://twitter.com/download/iphone\" rel=\"nofollow\">Twitter for iPhone</a>",  
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  "coordinates": null,  
  "entities": {  
    "symbols": [],  
    "user_mentions": [],  
    "hashtags": [],  
    "urls": []  
  },  
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    "url": "https://api.twitter.com/1.1/geo/id/017a75c0406737c7.json",  
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    "bounding_box": {  
      "type": "Polygon"  
    }  
  }  
}
```

```
place": {
  "full_name": "Montgomery Village, MD",
  "url": "https://api.twitter.com/1.1/geo/id/017a75c0406737c7.json",
  "country": "United States",
  "place_type": "city",
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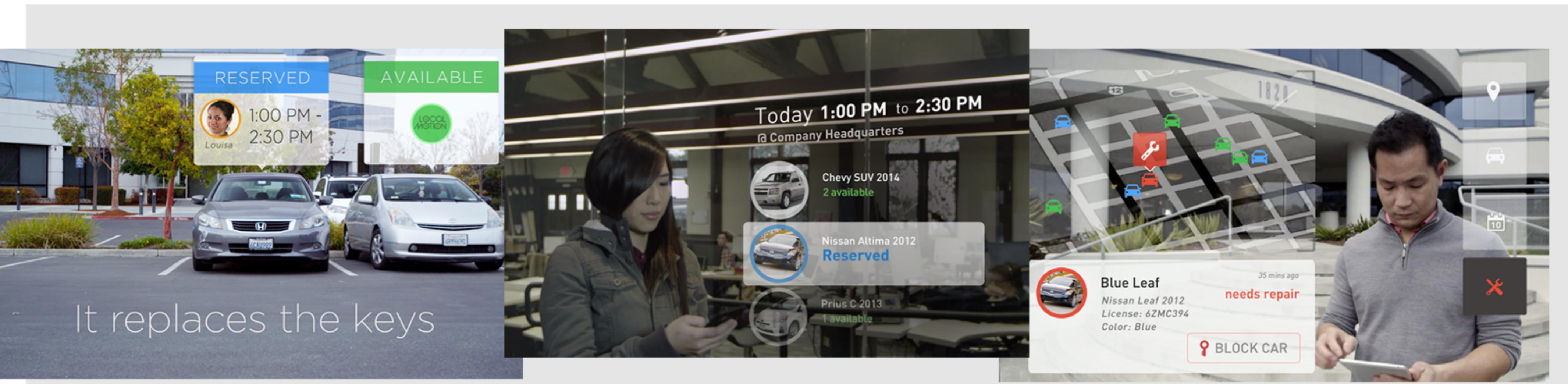
VIDEO INTERFACE & MOTION GRAPHICS

FEB. 2014 - APR. 2014



PELOTON VIDEO

Conceptual interfaces and video prototyping for Peloton product video with WKG Productions to demonstrate how radar technology helps long-distance truck drivers prevent collision through peripheral linking and auto-braking.

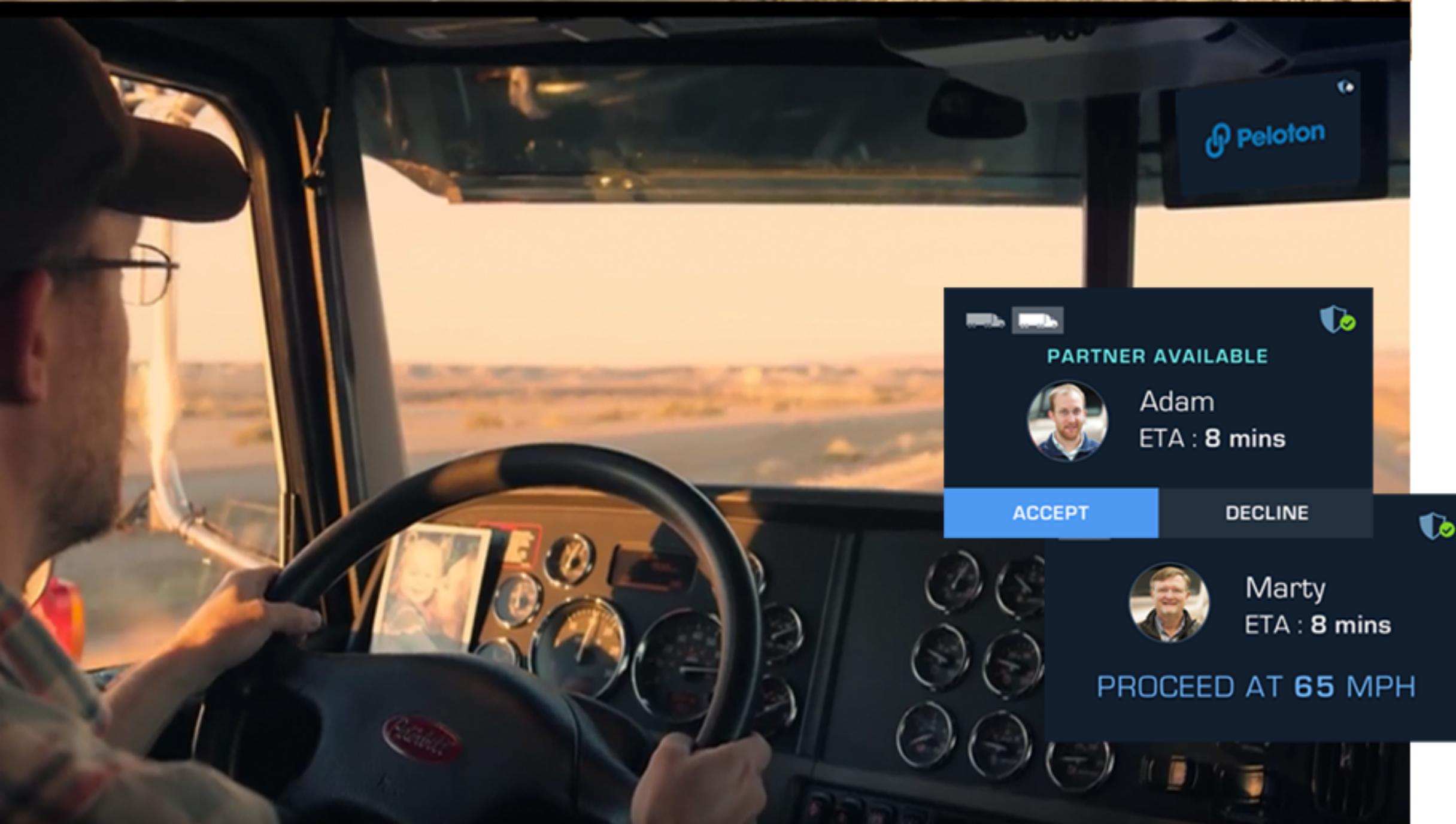
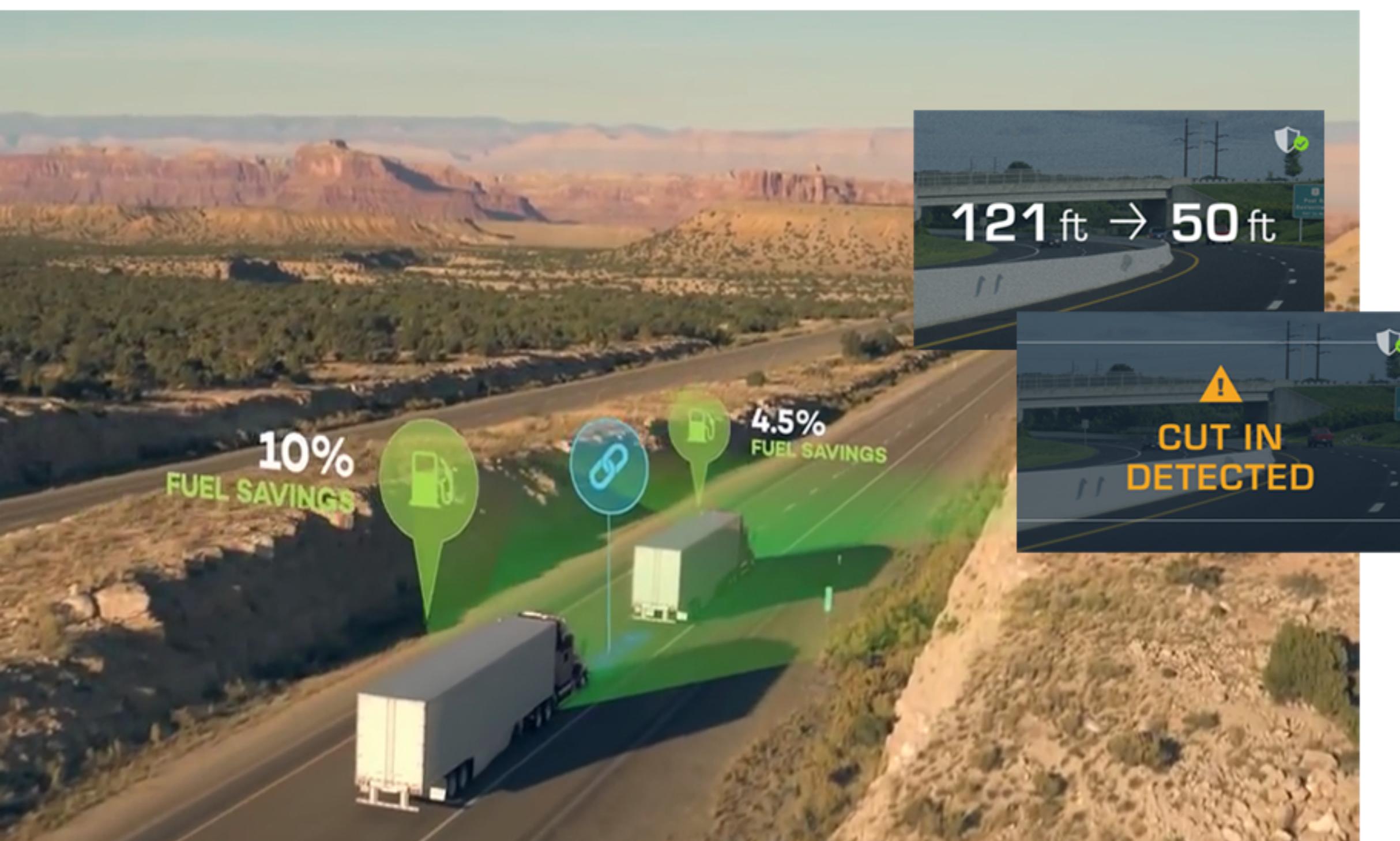


It replaces the keys



LOCALMOTION VIDEO

Conceptual interface and animations for Local Motion product video with WKG productions. Local Motion facilitates enterprise fleet cars with custom sensors that lock/unlock cars based on data from a reservation system and signal maintenance.



Internal Driver Display for Automated Truck Platoons

Peloton develops powerful automated trucking technology to help drivers stay connected, prevent accidents, and increase fuel efficiency.

I was invited to lead a sprint project for an upcoming rollout with UPS (United Parcel Service) to reimagine the user experience of Peloton's internal driver displays, working closely with the team's lead engineers and cofounders. Based on observations from real test drives, I led a detailed UX exploration of the parallel user / system state relationships and created early interface concepts, supplemented with suggestions on inputs, safe linking, and braking procedures. The exploration included user scenarios requiring novel, complex interactions to be orchestrated step-by-step between partnered platoon drivers on the road, the DSRC technology connected truck braking / acceleration systems, and Peloton's cloud-based fleet control center. This work created the foundation for further design development, wireframes, product videos, and road tests.

Full design work is confidential but the following videos are available to learn more and see the UI in motion:

- Partner driver system :

<https://www.youtube.com/watch?v=tLWGponorA>

- Platooning Technology explained :

<https://www.youtube.com/watch?v=ncsRS-eldAo>

STARTX & DCVC



accelerating the world's top startup founders

StartX Stanford Startup Accelerator

FEB. 2012 - SEPT. 2015

ROLE: Founding Designer in Residence, Design Mentor

StartX is Stanford University's partner Startup Accelerator and Fund co-investor. Joined on early staff team and served as first Designer in Residence.

- Led weekly office hours to provide 1-on-1 design and product consulting for the 20-25 founder companies in the program every quarterly session.
- Dived into diverse industry challenges, including medicine, clean energy, education, microlending, enterprise communications, epublishing, law etc.
- Organized design programming, workshops, and conferences
- Provided support as active design advisor for 3 years



DataCollective Venture Capital

APR. 2012 - PRESENT

ROLE: In - House Design Specialist

DataCollective invests in top big data infrastructure and cloud analytics companies. I provide specialized design support for DCVC's founding partners and portfolio companies.

- Craft custom data visualizations, deck materials for fundraising rounds
- Coaching & concept design for Vurb, winner of TechCrunch Disrupt NY 2014
- Design consulting and advising for portfolio companies

Currently involved as a remote design advisor.

* Most work not available for display/description because of non-disclosure agreements with companies.

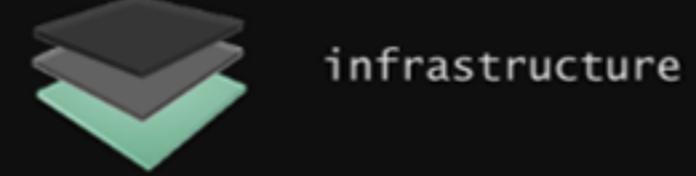
Data collective



applications



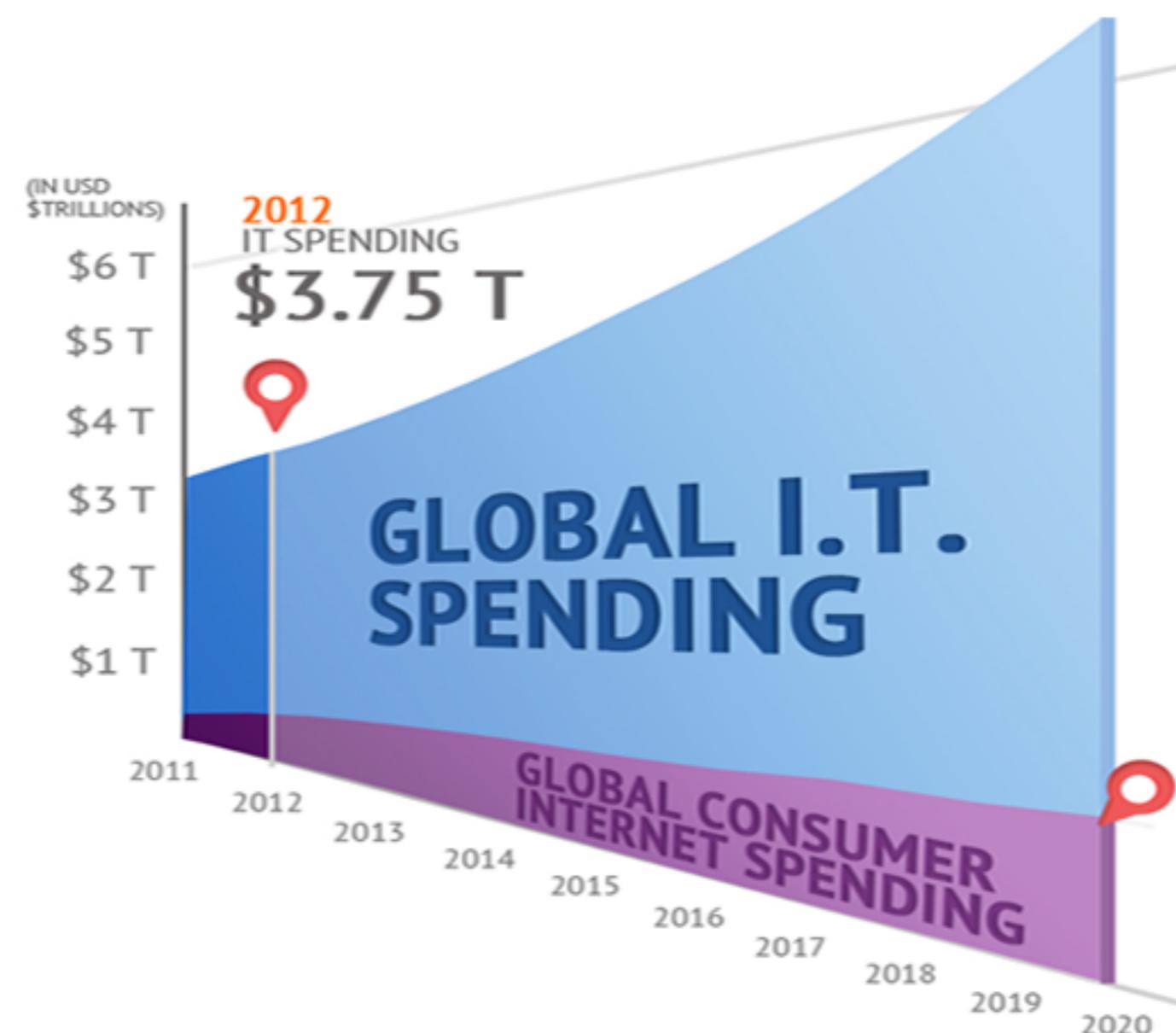
analytics



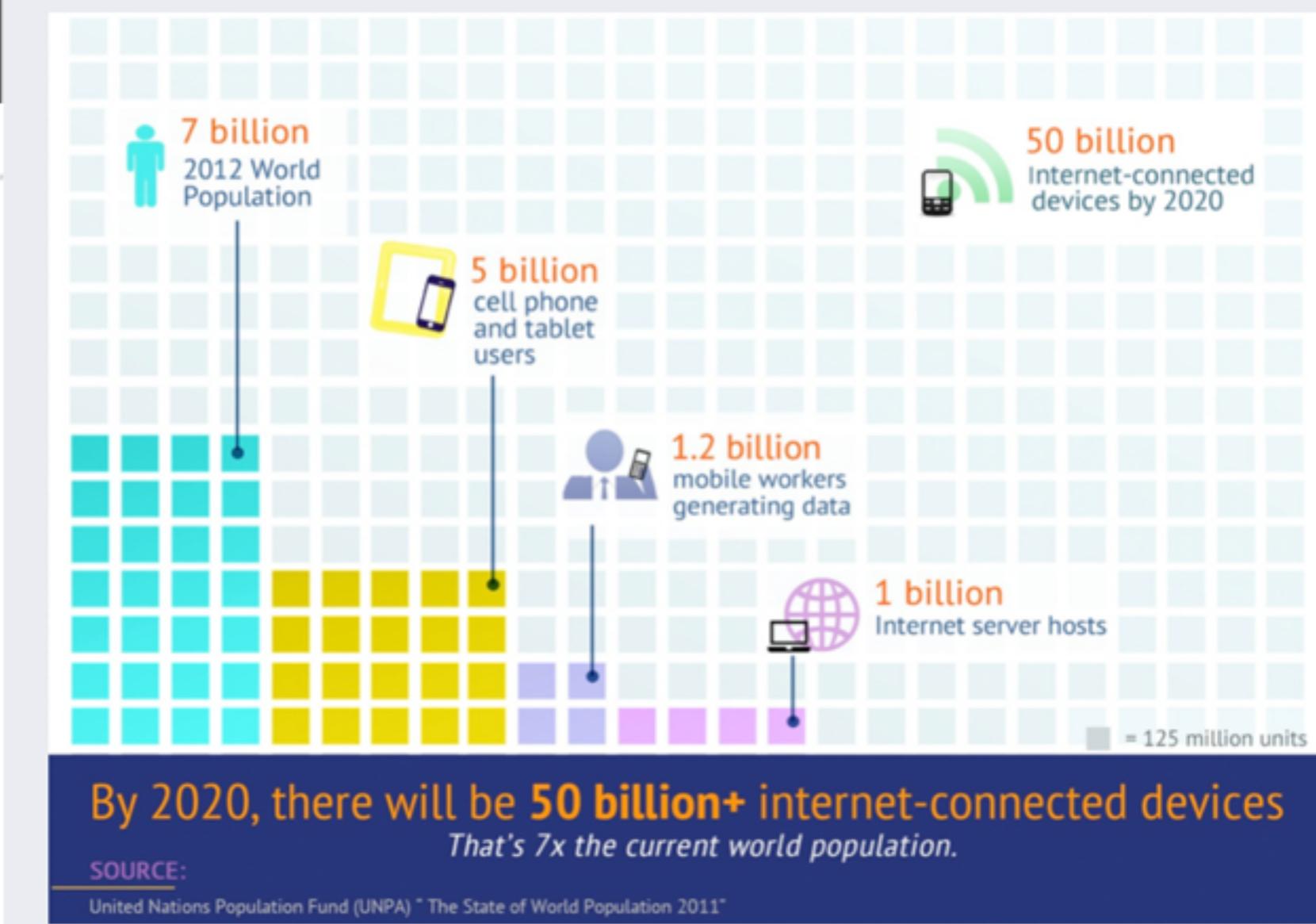
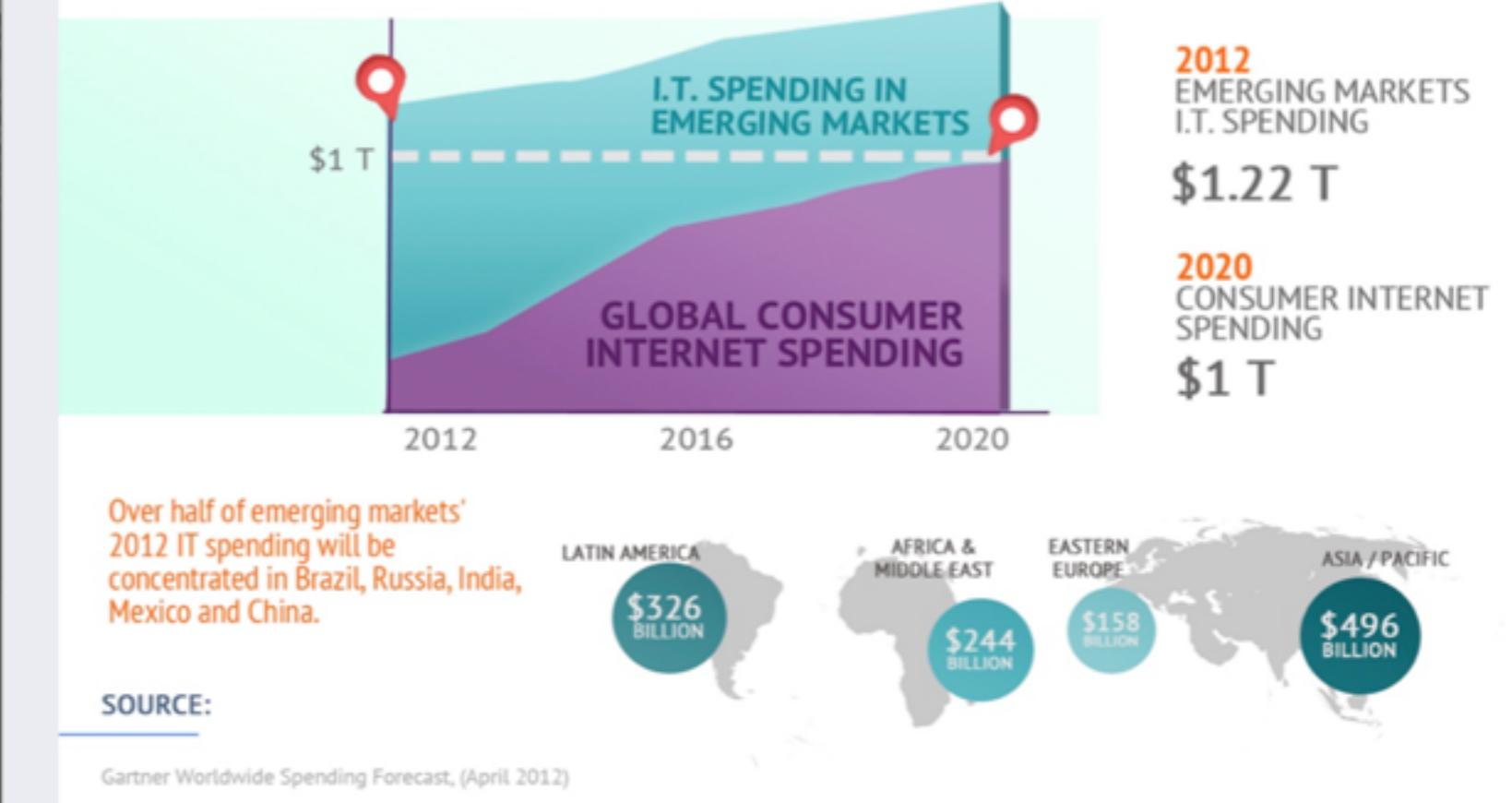
infrastructure

DCVC Projects

Some early infographic and visual style samples.



Emerging Markets alone will generate \$1.22 Trillion in 2012.
Consumer Internet will take 8 years to reach \$1 Trillion.



CLOUDPHYSICS

OCT. 2012 - AUG. 2013

HOST RESOURCE COMMITMENT

INVENTORY	HA CLUSTER	GUEST TOOLS	SNAPSHOTS GONE	HA SIMULATION	HOST RESOURCE	HOST INVENTORY
VENTER SERVERS 1 HOSTS 156 VIRTUAL MACHINES 1487	HA DISABLED 9 ADMISSION CONTROL DISABLED 32	NOT INSTALLED 174 NOT RUNNING 200 NEED UPGRADE 712	WILD 77 VM WITH SNAPSHOTS 106 OLDEST SNAPSHOT SEP 2008	MAX HA RESERVED CPU 73% MAX HA RESERVED MEMORY 81%	HIGHEST MEMORY 105% HIGHEST CPU 353%	HOST DEPLOYED VERSION 5.0.0 SERVER VENDORS 3

HOST RESOURCE	COMMITMENT
HIGHEST MEMORY	105%
HIGHEST CPU	353%

HOST RESOURCE	INVENTORY
HIGHEST MEMORY	HOST DEPLOYED VERSION
HIGHEST CPU	SERVER VENDORS

VM Performance Analytics & Network Insights Engine

ROLE: UI Designer, UX Process Designer

The Cloudphysics platform easily enables enterprise software engineers, managers, and sys admins to track real-time performance of their entire network of VMs, hosts, clusters etc. Analytics are organized into “cards,” or individual dashboards.

The challenge was to reflect the network relationships in the interface and then using user research, redesign the internal dashboards to surface and subtly highlight the most relevant data streams while still allowing for deep filtering. The Card Builder project (which I lead the original UI concept into production for) ultimately debuted at VMWorld 2013 as an innovative approach to customized analytics and fostering community between sys admins with common network needs.

Cloudphysics won first place for its Data Enterprise category and runner up for Best in Show at VMWorld 2013.

YOUR MAXIMUM VM UPTIME

VS TOTAL CLOUDPHYSICS VM POPULATION

VM: ERFFEIDG#232
1Y 10M 5D

MEDIAN: 1Y 12M 23D

FIND OUT MORE

Let us know where you do business and your industry to see more comparisons.

0B 322i

YOUR VM UPTIME DISTRIBUTION

#VIRTUAL MACHINES

UPTIME PERIODS

6 < 6M
9 6M - 1Y
10 1Y - 1.5Y
6 1.5Y - 2Y
8 2Y - 2.5Y
6 2.5Y - 3Y
3 3Y+

TOP 10 VIRTUAL MACHINES UPTIME

HOST NAME	UPTIME	LAST REBOOT	HOST VERSION	VCENTER MORE
2RPST.PROD1	1Y 11M 23D 9H 33M	21MAR11 9:15:33 UTC	5.0 UPDATE 1	● ●
2RPST.PROD1	1Y 11M 23D 9H 33M	21MAR11 9:15:33 UTC	5.0 UPDATE 1	● ●

(CLOUDPHYSICS CARD BUILDER DEMO)

PROPERTIES

VM	memorySize	VMName	guest OS	numberOfCPUs
affinitySet	toolsRunning	add property	add property	add property
balloonedMemory				
bootTime				
cpuCount				
cpuReservation				
guestDiskCapacity				
guestDiskFreeSpace				
guestFullName				
guestHostName				
guestIpAddress				

DISPLAY PARAMETERS

SELECTED FILTERS

- VM memory size is >= 2 GB
- VM power state is ON

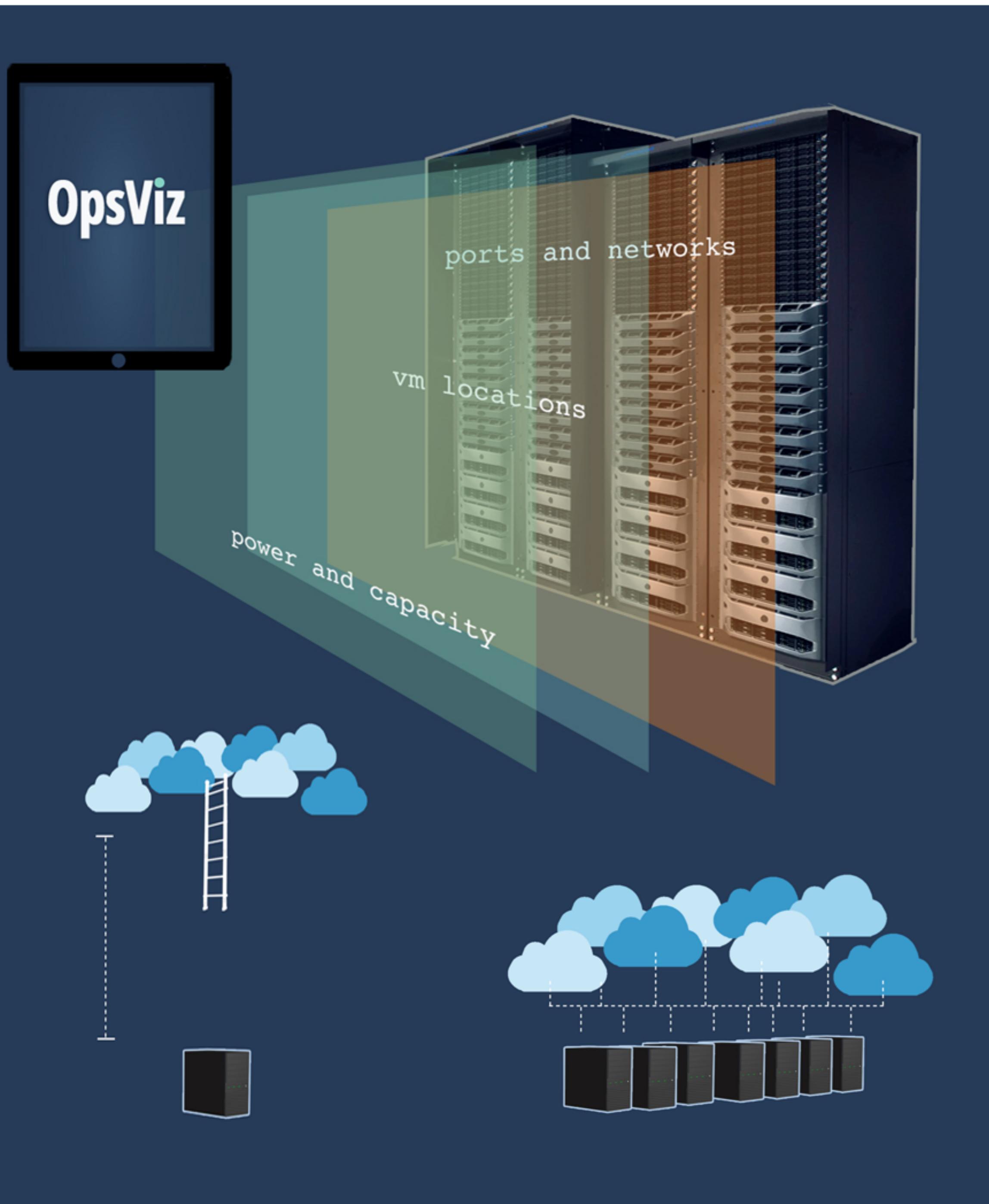
New filter, choose a property to get started!

New filter, choose a property to get started!

Create my custom card

OPS VIZ

JUNE. 2013 - SEPT. 2013



Protecting the Cloud, from the Bottom Up

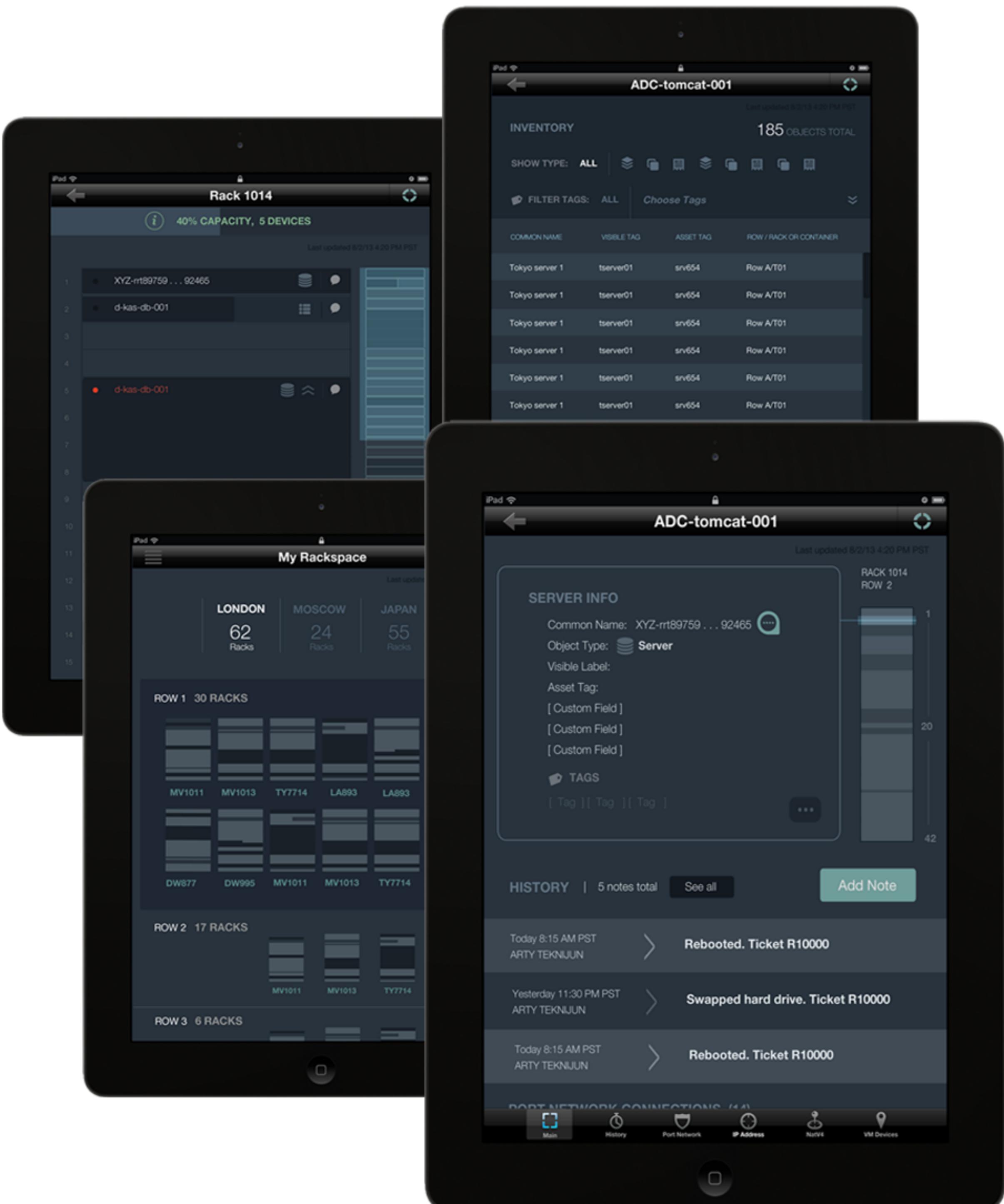
ROLE : First designer, solo end-to-end application design, user experience, and information architecture

The OpsViz iPad app helps datacenter technicians efficiently manage machine stacks operations on the ground floor without being dependent on desktop software or archaic processes.

All the world's companies, from small businesses to multi-billion dollar corporations, depend on some kind of server to host their valuable data and client information. Even temporary outages can cost millions in lost business and customers -- outages that 73% of the time are attributed to preventable human error of technicians in the datacenter. Despite this, most maintenance processes in datacenters are still largely run using paper print-outs and physical stickers to indicate machine status. This is a very inefficient and painful way of doing things.

OPS VIZ

JUNE. 2013 - SEPT. 2013



Mobile Datacenter Operations Management Platform

The OpsViz app has 3 main modes of function: 1. a visual diagram of the physical rack identifying the machines on each row with real time status and a log of maintenance notes, 2. an inventory page of active VMs, ports, power capacity, software updates running on each machine and 3. a dynamic search to allow technicians to locate specific machines, devices, networks, and server locations within a custom rackspace. The main challenge was figuring out how to prioritize and organize the overwhelming amount of system and hardware data attributes associated with each machine. Ultimately, design decisions were reached after interviewing users to understand the technicians' daily routine, how often they checked different data categories, how the data was logically surfaced in the system, and what information was key at which level in driving a maintenance action.

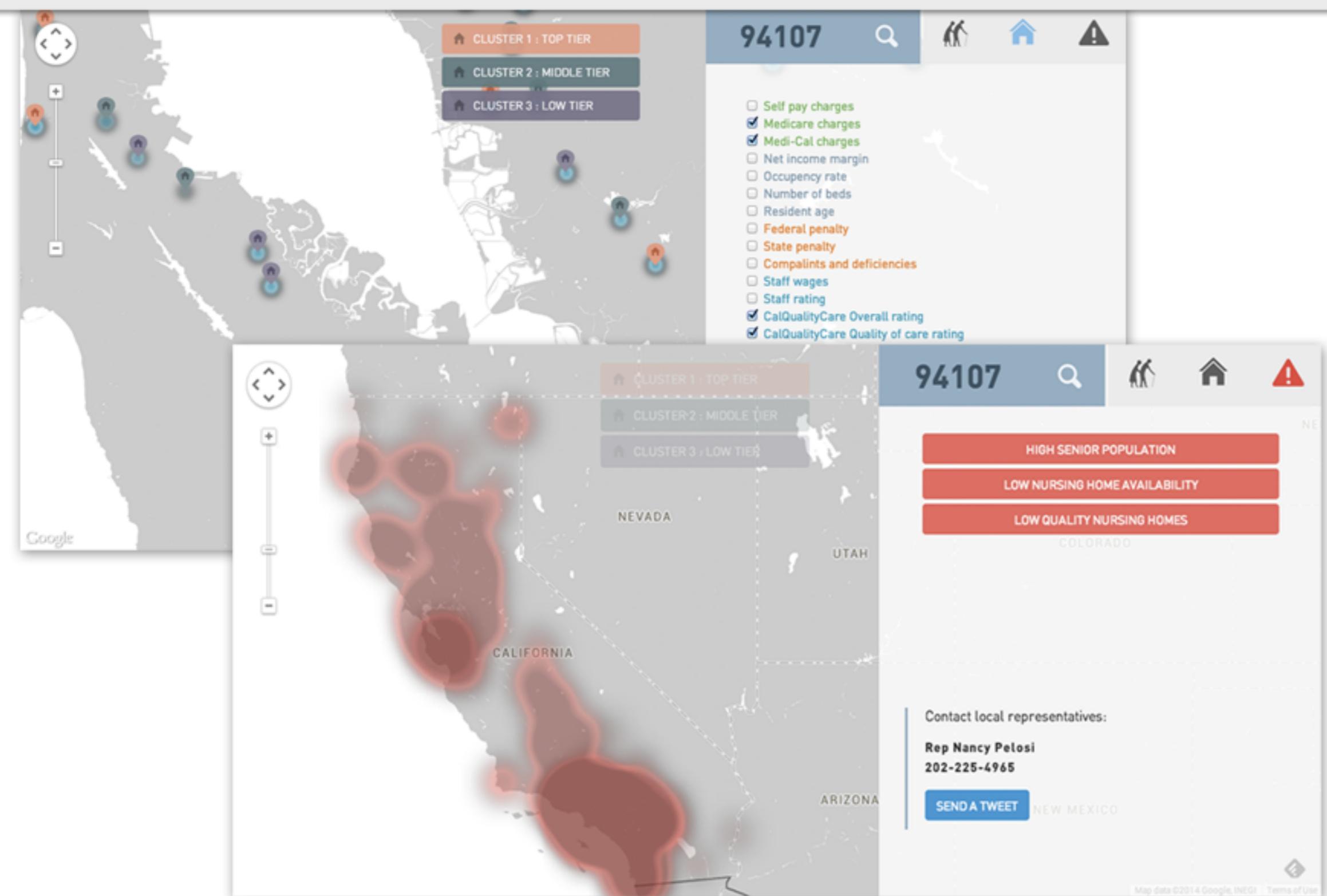
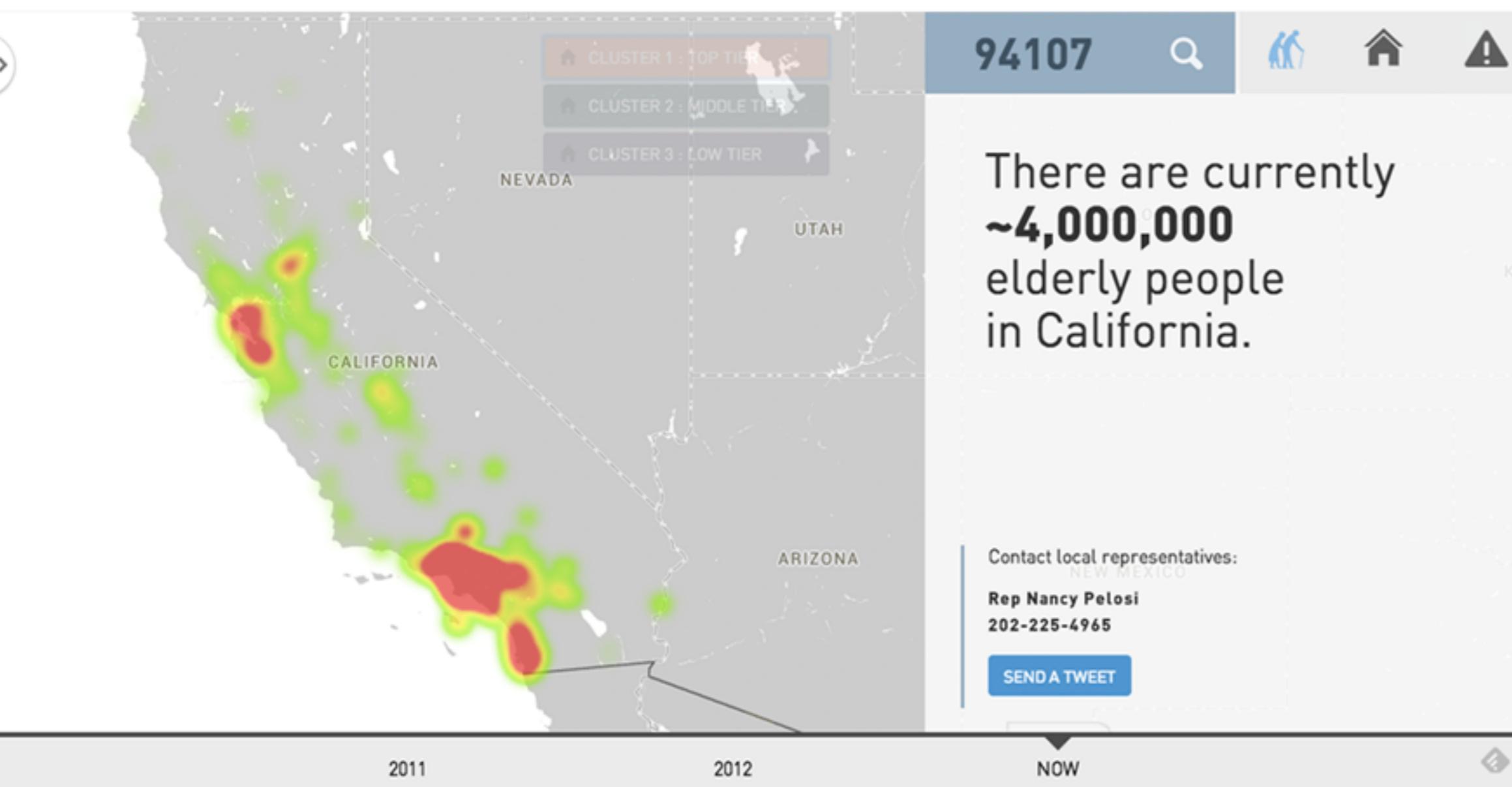
* NOTE

OpsViz was an operational company with seed funding and paying datacenter clients. Currently on hiatus due to changes in founder personal circumstances.



OpsViz Camera & Google Glass Integration

After visiting the Santa Clara datacenter to observe physical machine conditions to better understand the technicians challenges, we integrated a camera scanning feature to facilitate the machine ID barcode retrieval and experimented with how the platform would look as Google Glass status cards.



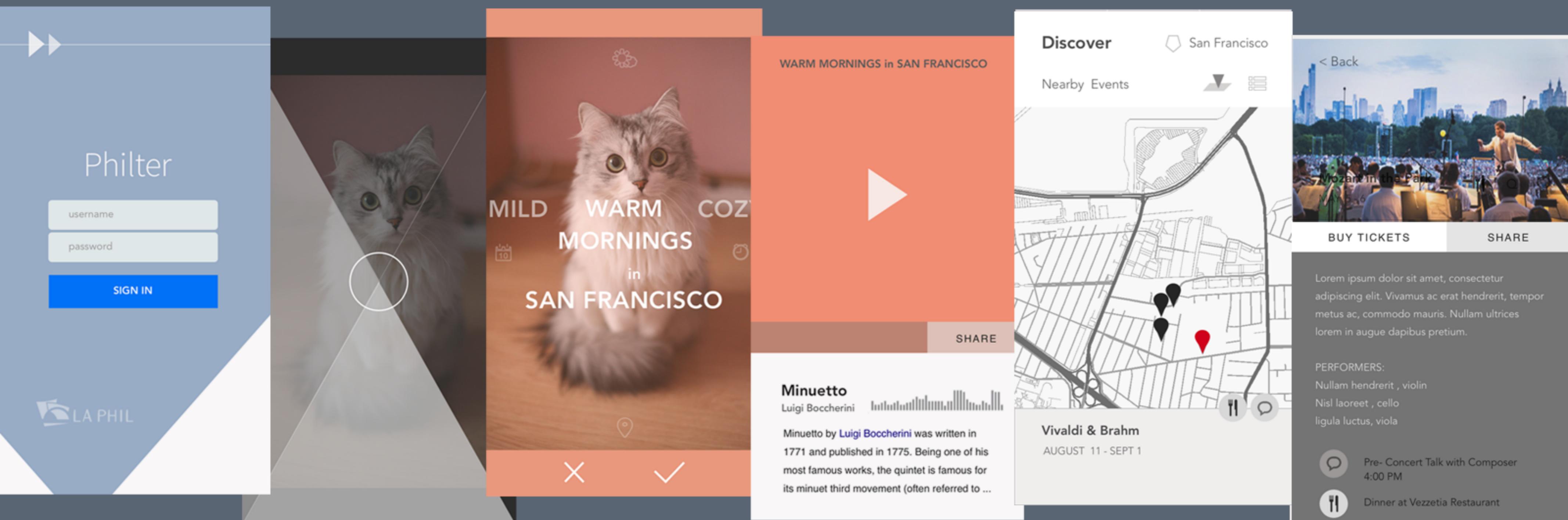
Elderly Population Visualization Tool

Lead a small team of data scientists and developers to create an interactive visualization tool for California Health Foundation in 24 hours as part of the invite-only Bayes Impact Data Science for Social Good hack competition.

Using multiple data sources around demographics and nursing homes, we want to validate this higher demand and showcase data to allow consumers to choose a nursing home based on quality metrics. We clustered the nursing homes into three major categories: Top tier, Mid tier, Low tier, each characterized by their average cost, funding sources, quality of care, complaints, and staff quality. We revealed subtle correlations between ethnic groups, resident needs, and nursing home categories.

Nursing homes and other facilities receive funding from the state based on their quality score and area serviced but current methods overlook many crucial factors. Our goal is to help policy makers better allocate funding and prepare for the inevitable crunch in elderly care.

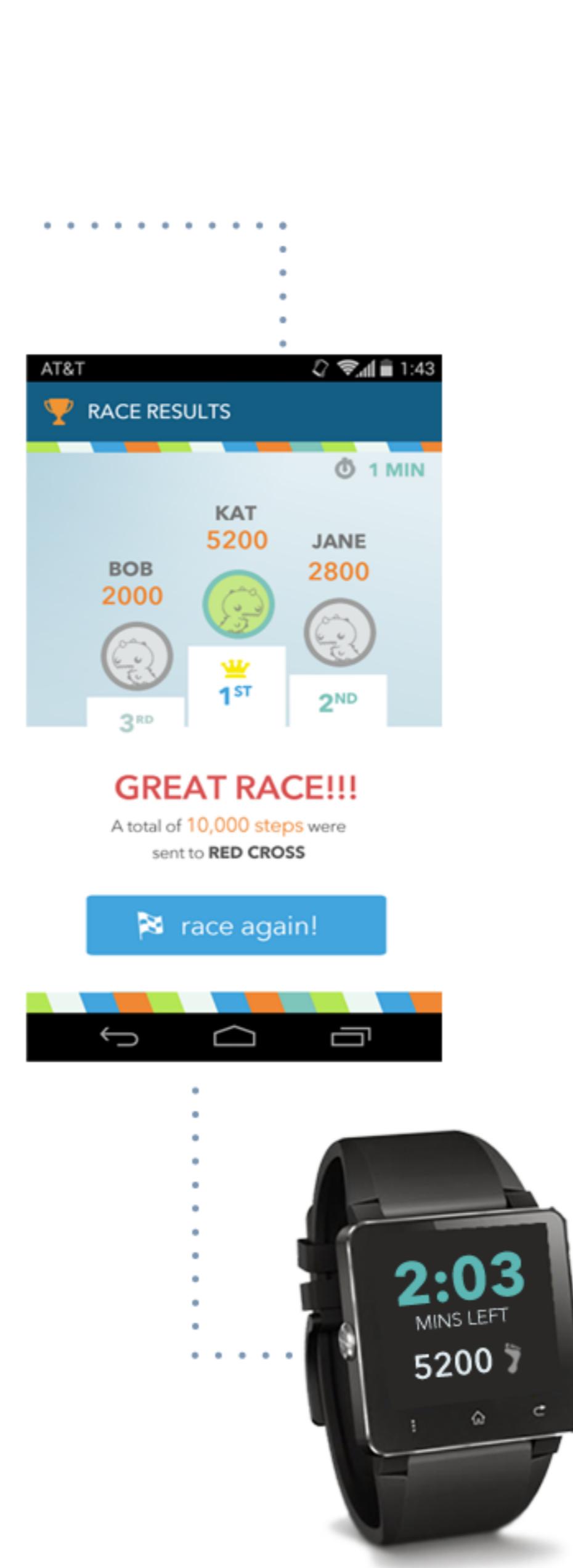
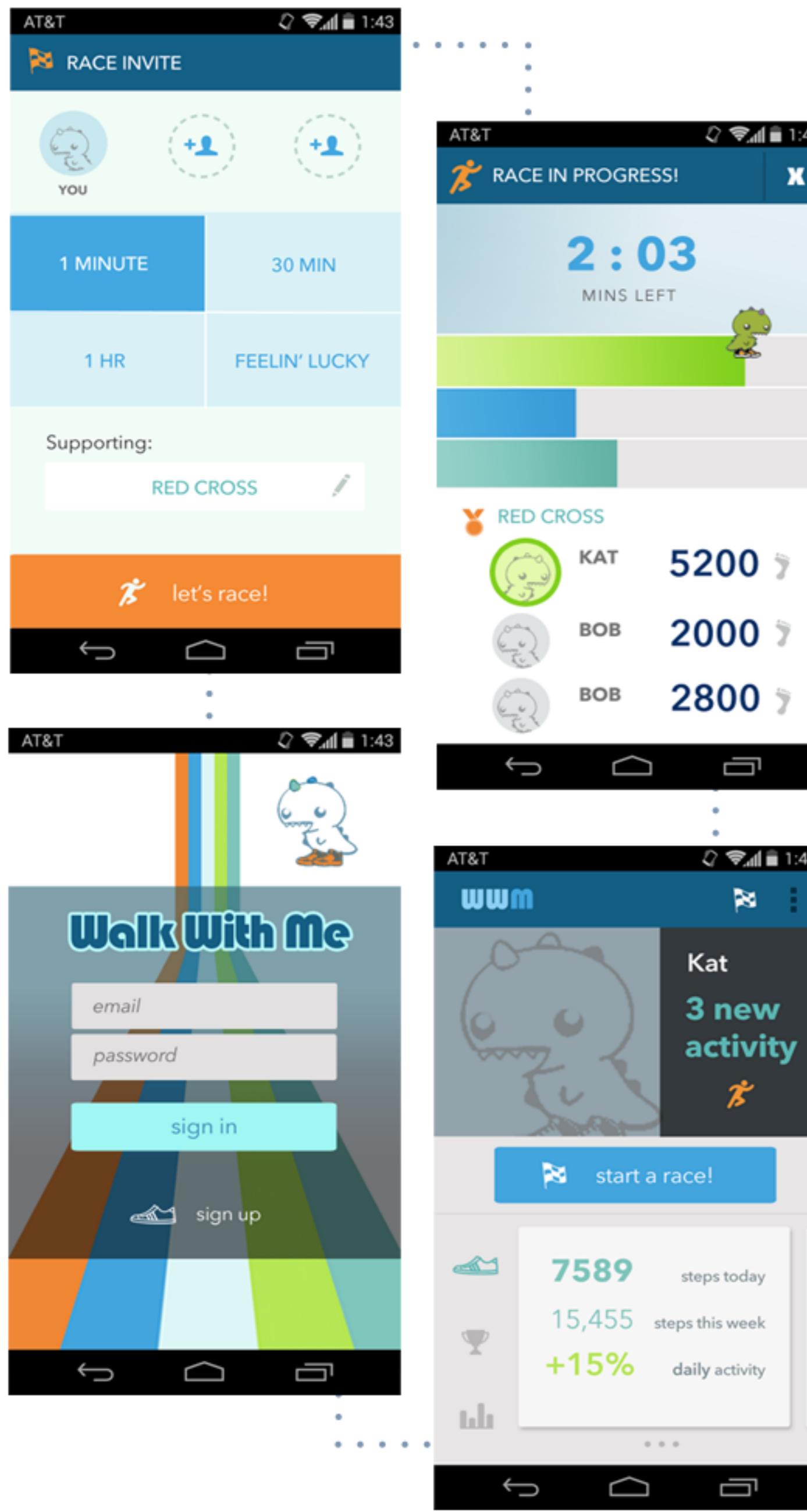
Our team made top finalist and we hope to further build out the project someday : <https://github.com/tpae/bayes-nursing-homes>



LA PhilHarmonic Music Discovery App

Worked directly with the Marketing Director of LA Philharmonic Symphony and SVI Tech Consulting group to create a design proposal of musical discovery app for young adult audiences to explore classical music.

Built from UX concept around memory association and moods, the Phlter app integrates metadata from user's pictures/videos to generate musical recommendations paired with a shareable multimedia collage. Users can also learn more about the piece and see when it'll be featured in nearby concert events to fully immerse themselves through a live performance experience. Mocks were made into a working iOS prototype with functional interactions.



Competitive Walking App for Good Health & Good Causes

ROLE: UX Concept, Interface + Interaction Design

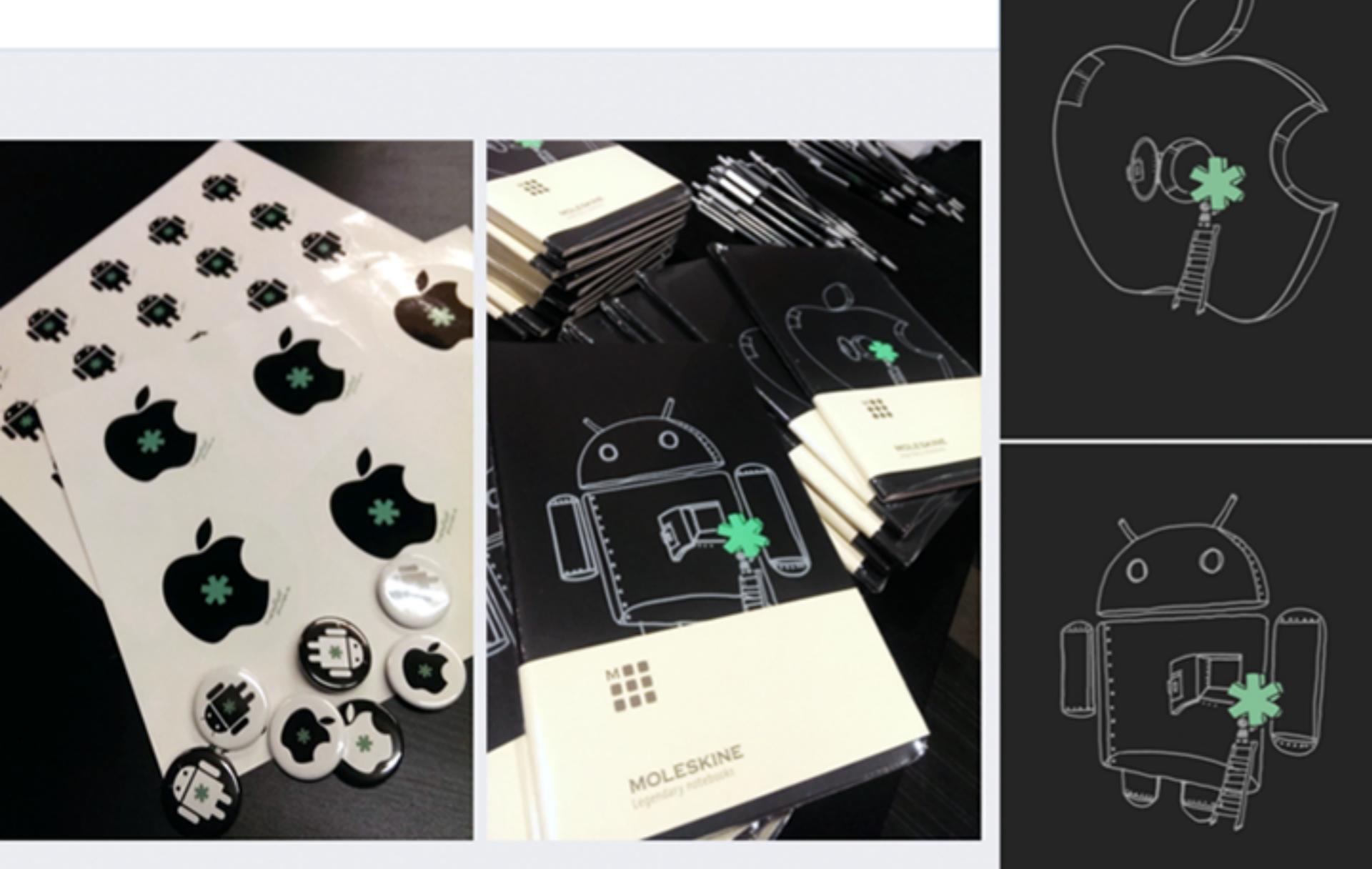
WalkWithMe is a mobile app prototype designed to encourage people to live healthier, more active lifestyles through fun timed races with friends, while supporting their favorite causes.

This was inspired by uplifting marathon experiences like Walk for the Cure or the Boston Marathon, which has brought so many communities together while raising money for those in need. WalkWithMe will empower anyone to show their solidarity and still walk in spirit wherever they are.

Steps during a race are tracked through device pedometer and updated real-time, and can even directly integrate with Android smartwatch OS. Users can track past races, share results, and see progress towards daily/weekly goals.

Produced on Android platform as part of Codepath Fall '14, iOS version and more wearable integration in future plans.

CODEPATH*

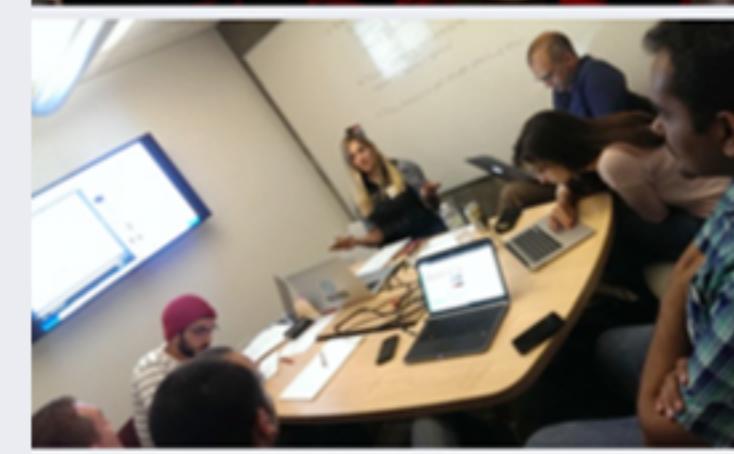


Codepath University

ROLE: Lead Program Coordinator / Product Manager, T.A.

Codepath provides accelerated mobile development classes for professional senior engineers and designers. Codepath education has been established as the new bar of excellence in mobile dev qualifications, adopted as internal team training for Apple, YouTube, Yahoo, Dropbox, Facebook, and more.

- Proposed, planned, and directed a pilot program in Summer 2014 providing cross-platform app development for vetted non-profit organizations. Resulted in positive feedback and a partnership offer with VitalVoices, Hilary Clinton's non-profit supporting international woman entrepreneurs
- Scoped and managed simultaneous app product development processes with curriculum goals. Ensured quality and progress pace across 6 integrated teams (each comprised of 8 designers / engineers) to produce 12 Android & iOS apps.
- Developed design mentorship program for engineering classes
- Helped TA first Swift iOS for designers class



MISC. WORK

JULY 2012 - AUG 2015

**SERVING OUR
COMMUNITY**
**PLANNING FOR
OUR FUTURE**

BRYAN TOWNSEND
SENATOR ★ 11TH DISTRICT



Dear Neighbor,

It has been a true honor to serve our district in the State Senate for the past two years. Since 2012, I have led efforts to address several important issues in our district. I have also brought a new level of responsiveness and active outreach to our Senate seat.

From education, to jobs, to public safety, to senior issues, we have taken big strides— and there is much more to do. I am seeking re-election to continue the progress we have made together.

This pamphlet shares details about the efforts I have led, and about the ideas and plans I have for the future of our district. Your vote and support in the September 9th Democratic Primary are critical to ensuring that we build on the momentum of the past two years and that we continue to have strong representation in the Senate.

Thank you for the opportunity to serve, and for your support as I seek a second term as your Senator.

Sincerely,

Bryan

BRYAN TOWNSEND
SENATE ★ 11TH DISTRICT

Democratic Primary --- September 9, 2014

BRYAN TOWNSEND
SENATE ★ 11TH DISTRICT

I am committed to being fully accessible to constituents. Please never hesitate to contact me with any suggestion, idea, or question.

Cell: 302.709.1516
Email: bryan@bryanDE.com

Thank you for your support in the September 9th Democratic



facebook.com/BryanTownsendDE
[@BryanTownsendDE](https://twitter.com/BryanTownsendDE)

Paid for by Townsend for Delaware Senate

BRYAN TOWNSEND

FOR CONGRESS

**BRYAN
TOWNSEND**

FOR CONGRESS

BRYAN TOWNSEND

FOR CONGRESS

**BRYAN
TOWNSEND**

FOR CONGRESS

dsea



**BRYAN
TOWNSEND**
STATE ★ SENATE

bryanDE.com

BRYAN TOWNSEND
SENATOR ★ 11TH DISTRICT

VOTE FOR OUR SCHOOLS
FOR OUR JOBS
FOR OUR COMMUNITY

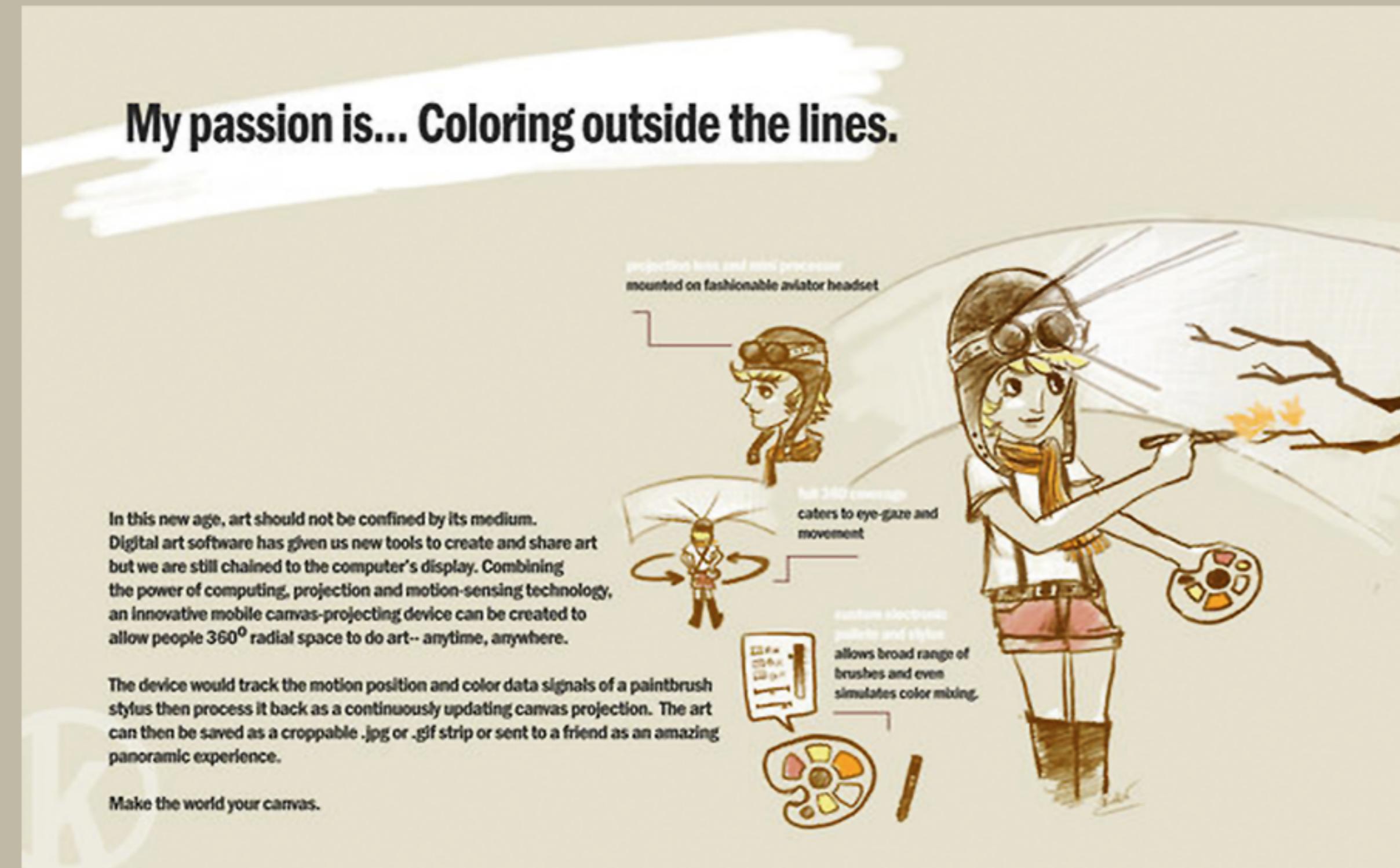
Democratic Primary: **September 9, 2014**

BRYAN TOWNSEND
STATE SENATOR



PR Design & Branding for Delaware Senate Elections, Congressional Election

Design and copywriting work for Senator Townsend's campaign during his 2012 election and consequent 2014 re-election. Rebranding typography & iconography work for US Congressional run in fall 2016.



Portable Projector Canvas

Design concept of a long-time fantasy to build a portable projector canvas that would allow me to directly draw and paint on the world as I see it in real time, then save a snapshot to share or continue editing later (i.e. Photoshop real life.) This won finalist in the eYeKa International Computing Vision Design Contest. With today's AR/VR and wearables technological advances (especially Meta2, Hololens, HTC Vive, Google Tilt Brush, vastly improved motion sensors etc), I look forward to reviving this dream.

“Creativity is making mistakes,
Art is knowing which ones to keep.”

- SCOTT ADAMS

KATHNN89@ALUMNI.STANFORD.EDU

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