Raphael Arar

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Portfolio
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Profile

I work at the nexus of complex systems, transdisciplinary design, and arts-based research. For the past decade, I've helped others both untangle messes and uncover opportunities through a balancing act of problem-solving and creative inquiry.

Professional Experience

Head of Design; One Project; Remote – 2021–Present
Stewarding the design, monitoring, and readjustment efforts of social-digital infrastructure to enable new economic models and systems of governance

Governing Board Member; Leonardo/ISAST; Remote – 2018–Present
Advising on strategic decisions for creative programming, branding, and publications. Leading the brand redesign effort of a 50+-year-old art, science and technology institution. Serving on the creative programming working group and assisting in curatorial endeavors.

Senior Design Manager; Khan Academy; Mountain View, CA (Remote) – 2019–2021
Serving as manager and principal designer of the learning platform team focusing on the future of student experiences both in and out of classrooms; led the design of a new product feature that received an NPS > 95% and a microsite that drove a 2x increase in the number of active teachers and learners to the platform

Principal Designer; Khan Academy; Mountain View, CA – 2018–2019
Led the end-to-end design effort of Khan Academy's first paid enterprise classroom products for K-12 differentiated learning, MAP Accelerator & Khan for Districts; shipped work exceeded our 22% user activation targets

Designer & Researcher; IBM Research; San Jose, CA – 2016–2018
Pioneered design-driven processes and led UI/UX, data visualization and tangible user interface design for R&D projects spanning new ML/AI systems; filed and was issued patents and published over a dozen papers on the intersection of design, art, and ML/AI

User Experience Design Lead; IBM; Cupertino, CA – 2014–2016
Created an accelerated design thinking methodology to scale the design and production of over 100 enterprise iOS/watchOS applications as part of the Apple+IBM partnership; facilitated design workshops with Fortune 100 clients; led and oversaw the UI/UX effort of teams globally

Lead Creative Designer; Kadenze; Santa Clarita, CA – 2013–2014
Crafted the identity and design language, managed a team of designers and instilled design processes for an arts-based EdTech startup

Designer (Freelance); Google, Inc. (Agency Team); Venice, CA – 2012–2013
Designed and implemented an internal data-driven web app to manage creative assets

Design Technologist (Freelance); Smithsonian Institute; Boston, MA – 2012–2013
Designed and built the web-based exhibits *Stories From Main Street* and *Stories of World Heritage*

Senior Creative Technologist; Hill Holliday; Boston, MA – 2011–2012
Led creative development of immersive ad campaigns for Dunkin' Donuts, Liberty Mutual and more

Interaction Designer; IBM iX; Cambridge, MA – 2009–2011
Founding member of Accelerated Visioning group—the first rapid prototyping service design group in the consulting division of IBM; led interaction design for award-winning B2B and B2C engagements

Interactive Designer & Developer; Modernista!; Boston, MA – 2009
Collaboratively devised bleeding-edge digital ad campaigns involving motion graphics and gaming

Interactive Designer & Developer; Paid Inc; Boston, MA – 2007–2008
Led the design & implementation data-driven web experiences for artists including Aerosmith, Run-DMC and others

Teaching Experience

Visiting Faculty; Pacific Northwest College of Art; Portland, OR – 2022–Present
Teaching a self-authored course on advanced interaction design specifically focusing on postcapitalist projects. Advising theses of MFA & MA students in the Collaborative Design / Design Systems program.

Visiting Faculty; California Institute of the Arts; Valencia, CA – 2022
Teaching a self-authored course in the theory and practice of systems art oriented around Jack Burnham's essay 'Systems Esthetics' featured in Art Forum in 1968

Adjunct Faculty; University of Nevada, Reno; Reno, NV – 2021
Taught a self-authored course in the Digital Media art program on tangible media/physical computing that discusses the intersection of interaction design and new media art

Adjunct Faculty; San Jose State University; San Jose, CA – 2016–2019
Created courses for and taught MFA/BFA students in SJSU's Digital Media Art program; taught courses and workshops in critical theory, speculative design and art & technology

Adjunct Faculty; University of Southern California; Los Angeles, CA – 2014–2016
Lecturer in USC's Media Art + Practice Division and taught first-of-a-kind, self-authored course on bridging user experience fundamentals with critical theory

Art & Technology Fellow; California Institute of the Arts; Valencia, CA – 2014–2015
Taught skills-based workshops to MFA and BFA students in physical computing, digital fabrication and video art. Provided advisory assistance on MFA thesis projects.

Education   California Institute of the Arts; Valencia, California – MFA in Integrated Media, 2014
                 Boston University; Boston, Massachusetts – BA in Economics (+ CS), BA in Music, 2009

Recognition

    2022   Awardee
                 Project Anywhere - Global Art Exhibition Program

                 Co-chair, Beyond Academia
                 Participatory Design Conference

    2020   Apple's App of the Day (January 22, 2020)
                 Khan Academy

    2018   Lumen Prize Short List - Artificial Intelligence Art Category
                 Nostalgia

                 TED Talk of the Day (April 2, 2018)
                 TED.com

    2017   Forbes 30 Under 30 Awardee, Enterprise Technology

                 IBM Academy of Technology, A-Level Accomplishment
                 IBM Travel Manager

    2016   C3 (Creative Community Committee), Elected Member, Santa Cruz Museum of Art & History

                 IBM First Patent Filing Award
                 Cognitive UX

    2015   C3 (Creative Community Committee), Elected Member, Santa Cruz Museum of Art & History

    2013   MITX Visionary Award
                 OPENPediatrics

Webby Award
Liberty Mutual Responsibility Project

National Science Foundation Grant Researcher (California Institute of the Arts)
Physical Computing

2012   National Science Foundation Grant Researcher (California Institute of the Arts)
Computer Science

Communication Arts Webpick of the Day
John F. Kennedy Presidential Library & Museum

Dope Awards, 1st Place Web Winner
John F. Kennedy Presidential Library & Museum

2010   IBM Service Excellence Award

2009   Webby Award Nominee
Modernista!

Patents   Providing force input to an application
US10318144B2

Managing consumer energy demand
US10742037B2

Method and system for displaying automated agent comprehension
US10936823B2

Method and system for correcting speech-to-text auto-transcription using local context of talk
US10832679B2

Suggesting a destination folder for a file to be saved
US11093447B2

Cognitive visual and ontological mapping of tabular data based on a distribution of a measure of interest
US10977294B2

Context aware user interface
US10901758B2

Cognitive role-based policy assignment and user interface modification for mobile electronic devices (pending)
US20200007411A1

Automated Assignment of Tasks Based on User Profile Data for Improved Efficiency (pending)
US20200364646A1

Dynamic modification of placeholder text in conversational interfaces (pending)
US20200134017A1

Analyzing temporal classes in user feedback (pending)
US20200372516A1

Minimizing Risk Using Machine Learning Techniques (pending)
US20200372397A1

Optimized transportation selection (pending)
US20200372590A1

Using artificial intelligence to iteratively design a user interface through progressive feedback (pending)
US20210011592A1

Customization and recommendation of tree-structured templates (pending)
US20210011896A1

Method and system for detecting hearing impairment (pending)
US20210015404A1

Topic Mining based on Interactionally Defined Activity Sequences (pending)
US20210027783A1

Counterbalancing bias of user reviews (pending)
US20210065257A1

Stabilizing consumer energy demand (pending)
US20200059096A1

Matching users by leveraging indoor proximity and availability (pending)
US20210124787A1

Speech-to-text transcription with multiple languages (pending)
US20210210098A1

Books

2019   Conversational UX Design: A Practitioner's Guide
Robert J. Moore, Raphael Arar. ACM Press. 2019.

2018   Studies in Conversational UX Design
Robert J. Moore, Margaret H. Szymanski, Raphael Arar and Guang-Jie Ren. Springer International Publishing. 2018.

Publications

2022   Mirrors: Reflecting the PDC Community
Raphael Arar, Daria Loi. 2022. Mirrors.
In Proceedings of the 17th Participatory Design Conference (PDC). ACM, New York, NY, USA.

Cybernetics of the Poor, Diedrich Diederichsen and Oier Etxeberria (eds) (2021)
Book Review in Virtual Creativity, Volume 11, Issue 2. 2022. DOI: https://doi.org/10.1386/vcr_00051_5

FEEDBACK LOOP(S) FOR MUTUAL LEARNING
Commissioned article in *Signals* jointly run by Gray Area and The Goethe Institut.

2020   PRIMER19, Futures for All, Parsons School of Design, New York City, USA, 13-15 June 2019
Conference Review in Virtual Creativity, Volume 10, Issue 1. 2020. DOI: https://doi.org/10.1386/vcr_00027_5

Food Carbon Footprint Index (FCFI)
Raphael Arar, Olivia Arar. 2020. Food Carbon Footprint Index (FCFI).
In Proceedings of the 16th Participatory Design Conference (PDC). ACM, New York, NY, USA.

2019   Co-designing AI Futures: Integrating AI Ethics, Social Computing, and Design
Daria Loi, Christine T Wolf, Jeanette L Blomberg, Raphael Arar, Margot Brereton. 2019.

Co-designing AI Futures: Integrating AI Ethics, Social Computing, and Design. In Proceedings of the 2019 on Designing Interactive Systems Conference 2019. ACM, New York, NY, USA. DOI: https://doi.org/10.1145/3301019.3320000

2018   PD Manifesto for AI Futures
Daria Loi, Thomas Lodato, Christine T. Wolf, Raphael Arar, Jeanette Blomberg. 2018. PD Manifesto for AI Futures. In Proceedings of the 15th Participatory Design Conference (PDC). ACM, New York, NY, USA. DOI: https://doi.org/10.1145/3210604.3210614

Nostalgia: a human-machine transliteration
Raphael Arar. 2018. Nostalgia: a human-machine transliteration. In Proceedings of the 2018 IEE VisArts Conference. IEEE, New York, NY, USA.

Applying User-Centered Design to Business Modeling: CBM.next as a Case Study
Raphael Arar, Guang-Jie Ren, Shun Jiang, Valeria Becker, Lei Huang, Eric Young Liu. 2018. Applying User-Centered Design to Business Modeling: CBM.next as a Case Study. In Proceedings of the 2018 IEEE 20th Conference on Business Informatics (CBI). IEEE, New York, NY, USA. DOI: https://doi.org/10.1109/CBI.2018.10065

Using Energy Storage to Modify the Shape of Internally Generated Demand to Fit a Prescribed Shape for Externally Presented Demand
Ray Strong, Shubhi Asthana, Eric Butler, Kevin Roche, Raphael Arar, Cheryl Kieliszewski, Pawan Chowdhary, Sandeep Gopisetty. 2018. Using Energy Storage to Modify the Shape of Internally Generated Demand to Fit a Prescribed Shape for Externally Presented Demand. In Proceedings of the 2018 IEEE International Conference on Services Computing (SCC). IEEE, New York, NY, USA. DOI: https://doi.org/10.1109/SCC.2018.00046

2017   Wayfinding
Raphael Arar. 2017. Wayfinding. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17). ACM, New York, NY, USA 1378-1381. DOI: https://doi.org/10.1145/3027063.3052543

Early Future Technology: Using Artificial Intelligence to Manage Design-Driven Intellectual Property
Raphael Arar, Ray Strong. 2017. Early Future Technology: Using Artificial Intelligence to Manage Design-Driven Intellectual Property. In Proceedings of the Portland International Conference on Management of Engineering and Technology (PICMET). IEEE, New York, NY, USA. DOI: https://doi.org/10.23919/PICMET.2017.8125332

Artificial Intelligence: Ethics, Innovation and Integration with Enterprise Practices

Raphael Arar, Jeanette Blomberg. 2017. Artificial Intelligence: Ethics, Innovation and Integration with Enterprise Practices. IBM Internal White Paper. San Jose, CA.

Conversational UX Design
Robert J. Moore, Raphael Arar, Guang-Jie Ren, and Margaret H. Szymanski. 2017. Conversational UX Design. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17). ACM, New York, NY, USA, 492-497. DOI: https://doi.org/10.1145/3027063.3027077

2016   Emerging User Experience Design for Industry Solutions
Raphael Arar. 2016. Emerging User Experience Design for Industry Solutions. IBM Internal White Paper. San Jose, CA.

2014   (+/-) Pendulum: Location in the Information Age
Raphael Arar. 2014. (+/-) Pendulum: Location in the Information Age . In Proceedings of the of the 20th International Symposium on Electronic Art (ISEA 2014). Dubai, UAE.

Participatory Data-driven Art Objects: Vessels for Kinetic Information
Raphael Arar. 2014. Participatory Data-driven Art Objects: Vessels for Kinetic Information. In Proceedings of the Conference on Computation, Communication, Aesthetics and X (xCoAx 2014). Porto, Portugal.

Anatomical Analogies: the Evolution of Harmony and Noise in relation to the Self and Society
Raphael Arar. 2014. Anatomical Analogies: the Evolution of Harmony and Noise in relation to the Self and Society. California Institute of the Arts Master of Fine Arts Thesis. Valencia, California.

2013   A History of Sequencers: Interfaces for Organizing Pattern-Based Music
Raphael Arar, Ajay Kapur. 2013. A History of Sequencers: Interfaces for Organizing Pattern-Based Music. In Proceedings of the the Stockholm Music Acoustics Conference and Sound and Music Computing Conference (SMAC/SMC-13). Stockholm, Sweden.

Talks & Workshops

2023   Modular political economy
Guest lecture for The Politics and Ethics of the Smart City class at Arizona State University. Tempe, AZ (remote). February 28, 2023.

One Project: Economic Vision, Theory, and Design Approach
Invited talk for Antikythera. Los Angeles, California. February 17, 2023.

2022	**Capitalist Contradictions / Postcapitalist Possibilities** Invited talk for Leonardo Art Science Evening Rendezvous (LASER) at Rochester Institute of Technology. Rochester, NY (remote). November 28, 2022.
	An Ecological Oracle Talk and panel participation on social justice & art. Splintered Realities - RIXC Art Science Festival 2022. Riga, Latvia (Remote). October 7, 2022.
	Co-chair, Participatory Design Conference (PDC) Co-chair at PDC, led panels in the Beyond Academia category, and organized key activities in remote hubs. Newcastle upon Tyne, UK & Remote. August 19–September 1, 2022.
	Feedback Loop(s) of Transdisciplinary Practice Invited guest lecture at the Illinois Institute of Design, Critical Contexts. Chicago, Illinois (Remote). April 22, 2022.
	Feedback Loop(s) of Transdisciplinary Practice Invited guest lecture at the Tecnológico de Monterrey. Chicago, Illinois. April 19, 2022.
2021	**Speculating on Alternative Models to Capitalism** Invited guest lecture at Pacific Northwest College of Art. Portland, OR. October 18, 2021.
	Food Carbon Footprint Index (FCFI) PostSENSORIUM - RIXC Art Science Festival 2021. Riga, Latvia (Remote). September 25, 2021.
	Dreams of justice through discursive design Interaction '21. Montreal, Canada (Remote). February 5, 2021.
2020	**Understanding nuance and bias in emotional AI technologies through art** Invited talk at Intel Labs Israel. December 9, 2020
	Deconstructing the attention economy through art Invited remote talk at the University of Nevada - Reno (UNR). Reno, NV. April 10, 2020.
	An aesthetic approach to untangling systems Invited talk at Rochester Institute of Technology (RIT). Rochester, NY. February 25, 2020.
2019	**Designing for the classroom & beyond** Invited talk for SF Design Week. San Francisco, CA. June 27, 2019.
	5 things designers can learn from teachers

Invited talk for Layers Design Confreence. San Jose, CA. June 5, 2019.

An aesthetic lens to machine intelligence
Keynote speaker for the Oscar Pomilio Forum. Pescara, Italy. March 7, 2019.

2018   Interactions
Keynote speaker for a Marketing Town Hall to IBM's Chief Marketing Officer. San Francisco,
CA. August 13, 2018.

The sight reminds me of our stupid fights. I miss them so much! Nostalgia and other things
AI can't replace
Leonardo/ISAST Panel Discussion for CODAME ART+TECH Festival at The Midway. San
Francisco, CA. June 6, 2018.

2017   Why Artificial Intelligence Research Needs Art
Invited talk for TED@IBM at SF Jazz Center. San Francisco, CA. December 6, 2017.

Exploring the Human-Machine Feedback Loop Through Art
Invited talk for Leonardo Art Science Evening Rendezvous (LASER) at San Jose State
University. San Jose, CA. November 9, 2017.

The Evolution of the Moving Image: Exploring the Role of Film Schools in the Age of
Extended Reality and Immersive Media
Panel discussion with Eric Darnell (Pixar) and Karen Dufilho (Google) moderated by Leighton
Pierce (CalArts Film School Dean) at Draper University. San Mateo, CA. November 5, 2017.

How Art Shapes User Experience
Invited talk at the Computer History Museum. Mountain View, CA. October 6, 2017.

WORKSHOP#2: What Now? The world Post-Automation...
Panel discussion with Jim Spohrer (IBM), Ron Poznansky (IBM) and Phil Balagtas (McKinsey)
as part of the Speculative Futures/PRIMER Conference Series hosted at IBM Studios. San
Francisco, CA. July 6, 2017.

The Intersection of Aesthetic Practices and Bleeding-edge Design
Invited talk at IBM Watson West as part of the 50th Anniversary of the Turing Award. San
Francisco, CA. June 22, 2017.

Conversational User Experience Design
Workshop lead at ACM CHI 2017 at the Colorado Convention Center. Denver, CO. May 6,
2017.

Art/Science and the Art of Illusion
Invited artist talk at the El Camino College Planetarium. Torrance, CA. April 29, 2017.

Conversational UI Best Practices
Invited talk as part of the LAUNCH Festival at the Palace of Fine Arts. San Francisco, CA. April 6, 2017.

Applying Science to Conversational UX Design
Invited talk with Robert J. Moore for SXSW 2017 at JW Marriott Ballroom. Austin, TX. March 13, 2017.

Cultivating Cognitive Experiences
Invited talk as part of Nerd Nite Silicon Valley at The Tech Museum. San Jose, CA. February 2, 2017.

2016   Design for the Aging Population: UX Considerations
Invited talk for the IBM Academy of Technology Outthink Virtual Conference. May 12, 2016.

Trends and Impressions from SXSW
Invited talk for IBM Research Staff at Almaden Research Center. San Jose, CA. May 26, 2016.

Intro to Arduino: Output
Workshop lead at Idea Fab Labs. Santa Cruz, CA. May 26, 2016.

2015   DIY Projection Mapping
Invited artist talk at the El Camino College Planetarium. Torrance, CA. October 10, 2015.

Designing for Remote Collaboration
Invited talk at the School of Cinematic Arts at the University of Southern California. Los Angeles, CA. April 14, 2015.

Using Keynote to Prototype Interactions
Workshop lead as part of the Apple+IBM Partnership. Cupertino, CA. April 3, 2015.

Video Projection Mapping: Aesthetic Considerations
Workshop lead at the California Institute of the Arts. Valencia, CA. April 3, 2015.

2014   (+/-) Pendulum
Invited artist talk at Zayed University as part of ISEA. Dubai, UAE. November 8, 2014.

PhoneGap 101: Utilizing Web Technologies for Mobile Applications
Workshop lead at Machine Project Gallery. Los Angeles, CA. June 10 & 12, 2014.

Web Fundamentals for Mobile Design
Workshop lead at Machine Project Gallery. Los Angeles, CA. June 3 & 5, 2014.

Design Thinking for Interactive Literary Art & Digital Storytelling
Invited lecture at Art Center College of Design. Pasadena, CA. May 15, 2014.

Artist Portfolio Best Practices
Invited lecture at the California Institute of the Arts. Valencia, CA. May 3, 2014.

Intro to Arduino
Workshop lead at Machine Project Gallery. Los Angeles, CA. February 9, 2014.

Historical & Contemporary Precedents for Media Arts & Design
MFA Thesis Defense at the California Institute of the Arts. Valencia, CA. January 31, 2014.

2013   Advanced Processing: Programming Generative Art
Workshop lead at Machine Project Gallery. Los Angeles, CA. December 10 & 11, 2013.

Intro to Processing: Programming Fundamentals
Workshop lead at Machine Project Gallery. Los Angeles, CA. December 3 & 4, 2013.

Musical Soldering
Workshop lead at 1450 Ocean Gallery. Santa Monica, CA. October 12, 2013.

Light-sensitive Oscillators: Learn to Make Sound Circuits
Workshop lead at Machine Project Gallery. Santa Monica, CA. June 16, 2013.

2012   Amalgamation & Displacement: Art that Spans Time & Media
Invited artist talk at the University of Nevada, Reno as part of Prospectives International
Festival of Digital Art. Reno, NV. October 8, 2012.

2011   Interaction Design for Digital Experiences
Invited talk at the IBM Center for Social Software. Cambridge, MA. September 3, 2011.

Selected Press

2022   Glitching Time and Time-Based Media
The Brooklyn Rail
https://brooklynrail.org/2022/10/art-technology/Glitching-Time-and-Time-Based-Media

AI in Design and Art
Startup Funding Event
https://www.startupfundingevent.com

2021   "Why Design?" A Conversation Series
Modernist Studio
https://www.moderniststudio.com/featured/future-of-education-why-design/

How Cognitive Virtual Agents Can Revolutionize The Customer Support Industry
Forbes
https://www.forbes.com/sites/forbestechcouncil/2021/03/04/how-cognitive-virtual-agents-can-revolutionize-the-customer-support-industry/

2019   SF Design Week: Designing for classrooms and beyond
Clever
https://blog.clever.com/2019/10/sf-design-week-designing-for-classrooms-and-beyond/

2018   At IBM, Researchers Are Working To Make Robots Engaging Conversationalists
Inc. Magazine
https://www.inc.com/greg-satell/at-ibm-researchers-are-working-to-make-robots-engaging-conversationalists.html?cid=sf01001

Conversational UX design: What it is and who's paving the way
TechTarget
https://searchcio.techtarget.com/feature/Conversational-UX-design-What-it-is-and-whos-paving-the-way

How to make AI agents better conversationalists: Context is key
TechTarget
https://searchcio.techtarget.com/feature/How-to-make-AI-agents-better-conversationalists-Context-is-key

Tackling the 'ask me anything' challenge of a conversational interface
TechTarget
https://searchcio.techtarget.com/feature/Tackling-the-ask-me-anything-challenge-of-a-conversational-interface

2017   30 Under 30
Forbes Magazine
https://www.forbes.com/sites/kathleenchaykowski/2017/01/03/30-under-30-2017-the-young-innovators-transforming-enterprise-tech/#322b4769335b

This IBM researcher integrates science, math and art in his work
Silicon Valley Business Journal
https://www.bizjournals.com/sanjose/news/2017/02/09/this-ibm-researcher-integrates-science-math-and.html

Why Today's Designers Are Different
Inc. Magazine
https://www.inc.com/yazin-akkawi/how-technology-has-given-design-a-new-meaning.html

Why not? Pushing and prodding the possible, at TED@IBM
TED Institute
https://blog.ted.com/why-not-pushing-and-prodding-the-possible-at-tedibm/

10 ways that IT pros and developers can keep their tech skills up to date
TechRepublic
https://www.techrepublic.com/article/10-ways-that-it-pros-and-developers-can-keep-their-tech-skills-up-to-date/

Music, Integrated Media Alumnus Raphael Arar Makes Forbes' '30 Under 30' List
24700: News from California Institute of the Arts
http://blog.calarts.edu/2017/01/05/music-and-integrated-media-alumnus-raphael-arar-makes-forbes-30-under-30-list/

Five Alums, BU Academy Graduate on Forbes "30 Under 30" Lists
BU Today
https://www.bu.edu/today/2017/alums-forbes-30-under-30/

Top 30 Under 30 in Cloud
Computer Business Review
https://www.cbronline.com/news/cloud/top-30-under-30-in-cloud/

2016   Thinking Design in the Lab
IBM.com
https://www.ibm.com/blogs/research/2016/08/design-thinking-ibm-research/

The Imaginary 20th Century
Entropy
https://entropymag.org/the-imaginary-20th-century/

2014   Machine Project Takes Over the Gamble House

KCET

https://www.kcet.org/shows/artbound/machine-project-takes-over-the-gamble-house

AxS Festival: Sights, Sounds, and Science Collide in Pasadena
KCET

https://www.kcet.org/shows/artbound/axs-festival-sights-sounds-and-science-collide-in-pasadena

Jewish art culture: Movin' on up to the East side
Jewish Journal
http://jewishjournal.com/culture/arts/129325/

2013   Forty Artists Aboard a Mobile Art Lab Want to Collaborate With You
GOOD

https://www.good.is/articles/forty-artists-aboard-a-mobile-art-lab-want-to-collaborate-with-you

Catch the Bus
Rise Art
https://www.riseart.com/article/2013-06-03-catch-the-bus

Digital art exhibit pioneering new movement
ninemsn.com

Aluminum Heartbeat
CNET

https://www.cnet.com/uk/pictures/future-tech-expo-sci-fi-saxes-3d-printed-human-hearts-pictures/7/

2012   Preview: Cyberarts
DigBoston
http://collisioncollective.org/show/collision-18

GAME PLAY Artist Interview: Raphael Arar ("Synth-a-Sketch")
B(RICK)LOG
http://bricktheater.blogspot.com/2012/07/game-play-artist-interview-raphael-arar.html

WHIRL: Build It Up to Boogie Down
DigBoston

Exhibitions / Art

2023   CONTRACAP - Joan Truckenbrod Gallery
            Solo exhibition. Corvallis, Oregon.

2022   1.5° C - Michigan State University Museum
            An Ecological Oracle. Group exhibition. East Lansing, Michigan.

            The Quick Brown Fox - Moscow Museum of Applied Art
            DM MEME. Group exhibition. Moscow, Russia

            Invisible Labor - Carnation Contemporary
            Varied works. Portland, OR.

            Blind Date - Carnation Contemporary
            💸. Group exhibition. Portland, OR.

            C/Change - Goethe Institut / Gray Area Foundation for the Arts
            Framework 1A. Group online exhibition.

2021   the wrong biennale no 5
            Vibes. Group online exhibition (co-curator in partnership with Leonardo/ISAST).

            The Holland Project - University of Nevada, Reno
            Motor Studies. Solo exhibition. Reno, NV.

            PostSENSORIUM RIXC Art Science Festival - RIXC
            Food Carbon Footprint Index (FCFI). Group Exhibition. Riga, Latvia / Remote

2020   Prosthetic Memories, Writing Machines - Noema Magazine
            Noema AI Poet. Commissioned net art accompanying an essay on AI.

            Emerge Festival - Arizona State University, Mesa Arts Center
            Food Carbon Footprint Index. Group exhibition. Mesa, AZ.

            The Holland Project - University of Nevada, Reno
            Motor Studies. Solo exhibition. Reno, NV.

            Participatory Design Conference (PDC) - Manizales, Colombia / Remote
            Food Carbon Footprint Index (FCFI). Group exhibition. Manizales, Colombia / Remote.

2019   Dreaming in silicon, a design fiction workshop - Backyard San Jose/WeWork
            Participant-driven design fiction workshop on the future of Silicon Valley. San Jose, CA.

Crash Override 04 – The Lucky Horseshoe/Resident Advisor
Sound art performance with custom electronics. San Francisco, CA.

Human Design: Shaping ideas - Aurum/Ideas Factory
Fail Engine. Group exhibition. Pescara, Italy.

2018   A Life/Art/Science/Tech (LAST) Festival presented by Stanford University - SLAC National
Accelerator Laboratory
Nostalgia. Group exhibition. Menlo Park, California.

2017   International Symposium on Electronic Art - Centro Cultural Universitario Rogelio Salmona
Wayfinding. Group exhibition. Manizales, Colombia.

CHI 2017 - Colorado Convention Center
Wayfinding. Group exhibition. Denver, CO.

Art of Science/Science of Art - El Camino College Planetarium
Art of Science/Science of Art. Solo exhibition. Collaboration with Chris Weisbart. Torrance,
CA.

2016   30 years of research - Almaden Research Center (IBM Research)
Wayfinding. Group exhibition. San Jose, CA.

Changemakers - Santa Cruz Museum of Art & History
Wayfinding. Group exhibition. Santa Cruz, CA.

Old ways won't open new doors - Doc's Lab
Wayfinding. Group exhibition. San Francisco, CA.

Crashing into walls we've built - The Night Light
Wayfinding. Group exhibition. Oakland, CA.

Sleep is not for those who dream - Lock & Key
Wayfinding. Group exhibition. Los Angeles, CA.

2015   The Imaginary 20th Century - ZKM Centre for Art & Media
Sound art for an archival art platform. Group exhibition. Karlsruhe, Germany.

Forbidden Planet Night - El Camino College Planetarium
Forbidden Pixel. Solo exhibition. Collaboration with Chris Weisbart. Torrance, CA.

2014	The Entrance - Machine Inspired Art Gallery
	Echo echo bot. Solo exhibition. Los Angeles, CA.
	International Symposium on Electronic Art - Zayed University
	(+/-) Pendulum. Group exhibition. Dubai, UAE.
	The Machine Project Field Guide to the Gamble House - The Gamble House Museum
	Projected shadows. Group exhibition. Collaboration with Chris Weisbart. Pasadena, CA.
	Gemini Heart - Center for Integrated Media
	Gemini Heart. Solo exhibition. California Institute of the Arts. Valencia, CA.
	cutLog - The Clemente
	Horizon. Group exhibition. New York, NY.
	Improvised Sound Ping Pong Tournament - Machine Project
	Curation and live sound art performance. Group exhibition. Los Angeles, CA.
	Pre-Glo - Centre for the Living Arts
	Untitled Video Collage. Group exhibition. Mobile, AL.
2013	Chance Meeting in a Storefront - Machine Project
	Ping pong sound installation. Solo exhibition. Los Angeles, CA.
	Perform Chinatown - KesselsKramer Gallery
	SYNTH-A-SKETCH. Solo exhibition. Los Angeles, CA.
	Dimanche Rouge - Espoo Museum of Modern Art
	BITPHONE. Group exhibition. Espoo, Finland.
	Dublab 14th Anniversary Celebration - Maker City LA
	Experimental Raver Table Tennis. Group exhibition. Los Angeles, CA.
	NOW13 - Dark Horse Experiment
	Parasitke. Group exhibition. Melbourne, Australia.
	Engineered Art - CalTech Community Art Gallery
	Metal Hearts. Group exhibition. Pasadena, CA.
	Ambiguities & Illusions - Spaces Gallery
	Attic. Group exhibition. Hardwick, MA.

2012	COLLISION18:present - Cyberarts Gallery	
	Pathways. Group exhibition. Boston, MA.	

SIMULTAN Festival - Facultatea De Arte / Mansarda
Finding Comfort in Claustrophobia. Group exhibition. Timisoara, Romania.

Ignition 5.0 - The Fuse Factory
SYNTH-A-SKETCH. Group exhibition. Columbus, OH.

SQUARE - Teatro San Giorgio
Pathways. Group exhibition. Udine, Italy.

iDEAS_12 - New World School of the Arts
Attic. Group exhibition. Miami, FL.

Athens Video Art Festival - Ayias Irinis Square
Finding Comfort in Claustrophobia. Group exhibition. Athens, Greece.

Together Festival - MACHINE
SYNTH-A-SKETCH. Group exhibition. Boston, MA.

BEAM Festival - Beldam Gallery
SYNTH-A-SKETCH. Group exhibition. London, United Kingdom.

2011   GamePlay - The Brick Theater
SYNTH-A-SKETCH. Solo exhibition. Brooklyn, NY.

Skills

Design
Systemic Design, User Experience Design, Service Design, Interface Design (including mobile, web, and software applications), Tangible Interaction Design (including physical computing), Information Design (including data visualization), Discursive/Speculative/Critical Design, Graphic Design, Rapid Prototyping, Information Architecture, Creative Direction, Art Direction, Digital Strategy, Branding, Usability Testing

Programming
Javascript (Node.js, React), Arduino, Python, Java, C++, C, HTML5, CSS3, MongoDB/CouchDB/Cloudant, Unix

Fabrication
Industrial Design, 3D Printing, Laser cutting, CNC Machining, Metalworking, Carpentry

Environments & Tools

Figma, Sketch, Adobe Creative Suite, Fusion 360, Atom/Sublime Text, Eclipse, Xcode, Rhinoceros, Final Cut Pro, Omnigraffle