R A Y L C

neuro integrative design

PROFILE

use knowledge of human brain and pscyhology to create intelligent devices, spaces, and fashions in interaction-based systems.

CONTACT

email | rayluo@ucla.edu
research | rayluo.bol.ucla.edu/projects
photography | facebook.com/rayLCphoto
portfolio | rayLC.org

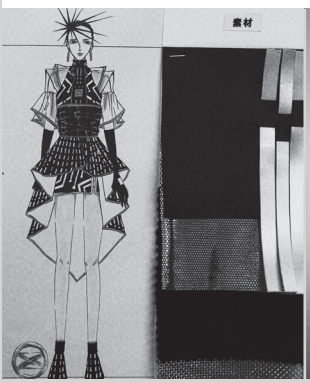
EXPERTISE

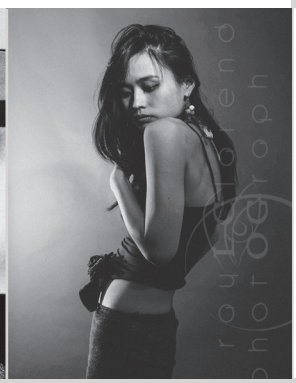
software | adobeCC premiere rhino3d arduino

programming | matlab c++ processing js unity

languages | english chinese japanese spanish

design | photography drawing fabrication sew





EDUCATION

2017 - pres | Parsons School of Design
Design and Technology MFA candidate

2013 - 2017 | Tokyo MODE Gakuen (東京モード学園)
Fashion Technology, MPS 2017

2000 - 2003 | University of California, Berkeley
Electrical Engineering and Computer Sciences, BS 2003

EXPERIENCE

PARSONS SCHOOL OF DESIGN | 2017 - 2018
Research Intern: built rotating 3-projector narrative system with Prof Jess Irish

RIKEN BRAIN SCIENCE INSTITUTE & UCLA | 2012 - 2016
Research Scientist: rewards are necessary to reduce anxiety in everyday tasks

PALO ALTO RESEARCH CENTER | 2003 - 2005
Research Intern: built steerable filter and particle filter probabilistic tracking algorithm for predicting human positions in cluttered videos

UC BERKLEY GROUP FOR USER INTERFACE RESEARCH | 2002 - 2005
Research Assistant: built a wall-sized interface that uses computer vision to recognize gestures, post-it notes, and touch for web design

UC BERKELEY COGNITION AND ACTION LABORATORY | 2002 - 2005
Research Assistant: created virtual haptic environment in design of experiments

STOTTLER HENKE ARTIFICIAL INTELLIGENCE CONSULTING | 2005
Software Intern: built artificially intelligent commander interface for air force

ACTIVITIES

2017 Winner Best Presentation: NYC Verizon Open AI Design Jam, with Wu & Mittelstaedt
2016 Falling Walls Tokyo Speaker: "breaking down the wall of mystery of creation"
2015 JSPS Kakenhi Wakate B (科研費若手) grant-in-aid for young scientists 25871125
2014 12th 1_Wall Gallery exhibition: "ダンス目なし" at Guardian Garden Ginza
2012 Editor in Chief, UCLA Mental Note newsletter
2009 A&E Editor, UCLA Pacific Ties magazine, rep speaker at Campus Progress conference
2006 Eugene V. Cota-Robles fellowship at UCLA

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INTERESTS

3D fabrication
affective computing
statistical learning
interactive installation
fashion technology
narrative design

HUMAN NETWORKS

Want to make the world a better place for humans? Make humans a better species for the world. I study the interactions within and amongst humans that make it possible to improve human lives through better communication, from the point of view of integrative design, neuroscience, and narrative art.

MACHINE INTELLIGENCE

Classical AI was an attempt to emulate thinking from the human mind point of view, while modern AI disgards the human point of view entirely and attempts to make efficient algorithms. My aim is to instead, create intelligences embedded in networks that make devices understandable and relatable to humans, so that our world can talk with us and we can communicate with others and with ourselves.

CURRENT WORK

Machines are becoming specialized and hard to understand. Instead of simplifying in the digital realm, I aim to adapt the digital to humans by creating smart robots and spaces that evoke emotional reactions. They can be caring, flaky, nagging, trusty, attention-craving, occasionally angry, and mildly jealous. A harmonious future involves machines that are part of the human ecology instead of opposing it. [https://recfreq.github.io/machines/machines.html]

To allow people from different cultures and people with emotional deficits to communicate with each other, we're working on AI embedded fashion that allows smarter communication between humans using arduino and computer vision. We also use AI-reinforced VR environments to train those with emotional deficits. [https://recfreq.github.io/inusfashion/inusfashion.html]

As the world become more saturated with news, scientific facts, and theories, we need a language that allows to show integrated concepts. One word can have different meanings in a given language, so "love" can mean familial love, sexual love, or love of country. I propose a language that uses multisensory stories as its basic morpheme. Experiments with the concept has been implimented in Processing. [https://recfreq.github.io/stream/stream.html]

Looking to assist, collaborate, and converse in areas related to product, space, UX, technology, AI, and speculative design. I'm excited to work in interdisciplinary teams, such as in my previous fashion, scientific, and art installation projects.