
RESEARCH INTERESTS

Human-Computer-Interaction, Generative Deep Learning, General-Purpose Robotics

EDUCATION

University of California, Berkeley

Master of Design – MDes Distinguished Scholar; GPA: 3.94/4.0

Berkeley, USA

01/21 – 05/22 (expected)

University of Applied Sciences Würzburg-Schweinfurt

Bachelor of Arts in Communication Design – With Distinction; GPA: 3.8/4.0

Würzburg, Germany

10/15 – 08/19

EXPERIENCE

MIT Media Lab

Visiting Student at 'Fluid Interfaces Group' – Deep Learning, NLP, Data Science

Cambridge, USA

12/21

Advisers: Adam Haar Horowitz, Pattie Maes

Used BERT to semantically cluster thousands of dream descriptions and analyze collective mental imagery with *Python, Pandas, NumPy, DF-GAN*. Developed novel pathfinding algorithm for connecting dream entries via locally optimal paths.

Microsoft Research

Research Intern – Procedural VR/AR Data Visualization

Redmont, USA

05/21 – 08/21

Advisers: Dave Brown, Steven Drucker

Created interactive visualizations for high-dimensional data in Unity at the Visualization and Interactive Data Analysis (VIDA) group. Developed data-driven, procedural 3D artifacts in *C#* for *AR/VR (WebXR)*.

UC Berkeley, College of Environmental Design

Graduate Student Researcher – Generative Deep Learning

Berkeley, USA

05/21 – 08/21

Adviser: Kyle Steinfeld

Designed a highly efficient pipeline for encoding 3D data in 2D representations for training GANs on 3D objects with no increase in computational expense. 3D-printed & cast GAN-generated artifacts for exhibition at the 2021 Venice Biennale. Presented at *NeurIPS*.

Helmholtz Institute for RNA-based Infection Research

Design Specialist Bioinformatics – 'Integrative Informatics for Infection Biology' Group

Würzburg, Germany

03/20 – 02/21

Advisers: Lars Barquist, Jörg Vogel

Lead developer and designer of 2 web apps for large-scale pathogenic RNA research on top of *pandas*. Designed and developed novel systems for visual programming, data mining, and interactive real-time 3D visualization for >1,000,000 data entries (*Python [Pandas, NumPy, Flask], Vue.js, MongoDB, deck.gl, HTML, CSS*). Maintaining CI/CD (*GitHub Actions, Kubernetes*).

KUKA Robotics

Undergraduate Student Researcher – Deep Learning for Robotics

Augsburg, Germany

06/19 – 07/19

Adviser: Rainer Bischoff

Independently organized funding and partnership with KUKA head of research for my bachelor thesis consisting of an industrial robot painting GAN-generated artworks on canvas & developed novel raster-to-CNC-path algorithm (*Python, OpenCV, KRL, NumPy, ProGAN, Bash*).

Volkswagen AG

UI/UX Design Intern

Berlin, Germany

09/17 – 03/18

Developed high-fidelity prototypes for a central app serving the modern VW fleet with *Framer / JavaScript, Photoshop, Xd*. Interactive prototypes were presented to board of directors. Prototyped chatbots & similar predictive assistants. Designed UX flows, & UIs, & corporate design guidelines.

SKILLS

Programming: Python (NumPy, Pandas), JavaScript (Vue.js), C#, Google Cloud Platform, Git, HTML/CSS, Linux (bash), CI/CD (GitHub Actions, Docker), MongoDB

Visual Design: Adobe CC (Photoshop, After Effects, InDesign, Premiere, Illustrator), Xd, Framer, Figma

3D: Unity (AR/VR, WebXR), Fusion360, 3DS Max, Corona Renderer, Quixel Megascans/Bridge/Mixer

Robotics: KUKA Robot Language, Programming KRC 4, KRL-Ethernet, Basics of Algor. Human-Robotic Interaction

Cinematography: DaVinci Resolve (Color Grading), Premiere, After Effects, Blackmagic Systems, Canon C, Sony FS

Fabrication: Raspberry Pi, 3D Printing, Laser Cutting, Soldering, TIG Welding, 6-Axis Robotic Fabrication

Languages: German (Native), English (Fluent, IELTS 8.0)

ENTREPRENEURSHIP

Provecho.bio

Design Lead

Berkeley, USA

02/22 - Present

Designing UIs and UX flows, and building new corporate identity as part of the core team of founders. Venture backed by \$500,000 seed investment.

Nimble Spaces, Inc.

Co-Founder

Berkeley, USA

04/20 - 06/21

Co-founded Nimble Spaces after winning InnoDays hackathon and receiving \$10,000 initial Investment from EDF Innovation Lab. Part of UC Berkeley's 'SkyDeck' & 'Big Ideas' incubators (5.3% acceptance rate). Manufactured & deployed 'Nimble parklet' resulting in the successful reopening of restaurant under COVID guidelines.

AWARDS & DISTINCTIONS

2020 Fast Company Linda Tischler Award: Winner

Berkeley SkyDeck Incubator (Hot Desk): Incubator spot for 'Nimble Spaces'. *Acceptance rate:* 5.3% (98/1850)

MDes Distinguished Scholar Award: \$20,000 scholarship from UC Berkeley.

Fast Company Innovation by Design Awards: Finalist

Big Ideas Contest: Finalist

ADC Junior Award 2020: Auszeichnung

A' Design Award 2020: Bronze

European Design Award 2020: Finalist

InnoDays Hackathon Berkeley: Winner 'Implementation'

InnoDays Hackathon Innsbruck: Winner 'Habitat'