# Kristian Zadlo

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<del></del> ]		Education	<del></del>

## M.S. in Integrated Design and Media (4.0/4.0)

New York University, NY

AUG 2020 - MAY 2022 (BEST THESIS AWARD)

**B.S. in Computer Engineering (3.9/4.0)** 

Rose-Hulman Inst. of Technology, IN

AUG 2017 - MAY 2020 (3 YEARS, MAGNA CUM LAUDE)

Augmented Reality Programming Machine Learning Virtual Staging Rapid Prototyping Fluent in English and Polish

Programming Companyons

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#### RELEVANT COURSEWORK

# Master's Thesis & Mobile Augmented Reality

- Authored 9 Snapchat augmented reality filters of which 2 have combined for 4 million interactions in 2 months
- Conceptualized, designed, and prototyped 14 experiences with voice, gesture, and facial expression recognition
- Compiled 2D and 3D assets in Maya, Photoshop, and Unreal Engine and created filters in LensStudio using Javascript

#### Mixed Reality Filmmaking & Virtual Production & Motion Capture

- Constructed virtual film sets with scenography and directory affordances by collaborating with 15 students remotely
- Filmed virtual shorts using 3D assets in Unreal Engine and Maya while compositing in Premiere Pro and After Effects
- Performed and cleaned 26 motion captures using Motive OptiTrack, RADiCAL, Maya, and MotionBuilder

#### **Experience**

#### Freelance WebXR Developer / Aircards / JAN 2022 - PRESENT

- Devised a hand tracking framework in Javascript for web-based mixed reality using MediaPipe, ThreeJs, and 8th Wall
- Realized recognition for 8 gestures and considered scalability by including 4 functions for mapping custom gestures
- Navigated domain challenges such as device framerate, varying hand orientations, and Cartesian vs Euler coordinates

#### Freelance Snapchat AR Integrator / inCitu / MAR 2022 - PRESENT

- Delivered 4 Snapchat augmented reality filters with world-scale buildings and consulted on Snapchat filter creation
- Developed 8 scripts in Javascript that adjust shader properties dynamically and enable animated user interactions
- Translated settings of 6 materials from Blender to LensStudio and programmed 2 user-controlled occlusion materials

#### AI Engineering Intern / Indiana Microelectronics, LLC, West Lafavette / IUNE - DEC 2020

- Engineered machine learning calibration software that improved the process from 480 man hours to 7 minutes
- Entrusted with conducting 5 client presentations, 30 minutes each, on AI calibration work
- Analyzed 6 datasets of up to 10,000 samples to design Neural Network and General Adversarial Network algorithms
- Enhanced productivity by creating 2 machine learning libraries and 2 database programs using Python and PyQT

#### Software Engineering Intern / Relativity, Chicago / MAY - AUG 2019

- Optimized 100 C# functional, integration, and unit tests to run 40 min faster across a multi-thousand file codebase
- Automated test code improvements and daily workflow for 16 people through 4 Powershell scripts
- Reduced test initialization time by 25% by connecting a Jenkins pipeline to Azure using Groovy and Powershell

#### Lead Developer / Vertabiz, LLC (Startup) / MAY - DEC 2018

- Facilitated software development by leading 3 software engineering interns and collaborating with 4 UX researchers
- Designed and implemented a Java RESTful service backend that connected to Firebase database
- Implemented a REACT Native application frontend that connected to RESTful services

#### **Volunteer Troop Leader and Chaperone** / Polish Scouting Organization / AUG 2014 - May 2021

- Organized and led 13 trips, up to 14 days in length, while budgeting \$4,000 for up to 40 people
- Spearheaded weekly leadership activities by collaborating with 6-person teams and managing \$10,000 across 3 years
- Mentored groups of up to 25 inner-city teens to become young, successful leaders

### TRACK AND FIELD

Ranked 7th in Heptathlon (2020, D3 Great Lakes Region)
Ranked 13th in Pole Vault (2020, D3 Great Lakes Region)
3x All-Conference Individual Champion (2018-2020)
13x Conference Scorer (2018-2020, 2022)

# Honors and Activities

Studied abroad in Rome, Italy

Eta Kappa Nu and Tau Beta Pi Honor Societies
Chicago Startup Weekend (3rd Place)

Terre Haute Startup Weekend (3rd Place)