1496 Clover Street | Rochester, NY 14610 <u>alexkautz.github.io</u> US Citizen

#### GOAL

- Full-time Software Engineering position that leverages my experience in algorithms, human-computer interaction, and data management and that provides opportunities to learn new skills and technologies.
- Join an agile development team that creates software to solve real-world problems.

## **WORK EXPERIENCE**

Intern Summer 2019 1010data New York City, NY

During this ten-week internship, I worked on a web back-end in Flask (Python) to manage Apache Airflow instances. I created a role-based access control system in order to enable safe and secure access by company employees. Through this project, I developed experience with REST APIs and database management through the Python library SQLAlchemy.

# National Science Foundation Research Experience for Undergraduates University of Minnesota

Summer 2017 Minneapolis, MN

Implemented an interactive graphical user interface for IBRelight, an image-based rendering and relighting tool for cultural heritage applications. The application creates a 3-dimensional model of an object from a series of still photographs. The interface allows the user to view the object under different lighting conditions and from any position in space.

Paper: "IBRelight: An Image-Based 3D Renderer for Cultural Heritage", by Michael Tetzlaff, Gary Meyer, and Alex Kautz. Presented at *Archiving 2018: Digitization Preservation, and Access*, Washington, DC, April 2018.

## **Research Assistant**

**Summer 2014** 

## Visual Perception Laboratory, Rochester Institute of Technology

Rochester, NY

Performed original research on the psychological phenomena of "attentional blink". Implemented a system that briefly flashed images and ran experiments measuring the ability of subjects to recognize faces.

### **EDUCATION**

# B.A. in Computer Science, Magna Cum Laude University of Rochester

Class of 2020

Rochester, NY

GPA: 3.91 Minor in Mathematics. Coursework included AI, HCI, Theory of Computing, Tools for Data Science, and Honors sequences in calculus and linear algebra.

### **SKILLS**

Programming Languages: Extensive experience with Java and Python

Tools and libraries: Blender, GitHub, AirFlow, Flask, SQLAchemy, Docker

Methodologies: Agile development, unit testing, test-driven development, user-centered design