

Alex Kautz

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alexkautz.github.io

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

Summer 2017

University of Minnesota

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

Class of 2020

University of Rochester

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, SQLAlchemy, Docker

Methodologies: Agile development, unit testing, test-driven development