# Austin Riopelle

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#### RESEARCH INTERESTS

I am interested in developing new approaches in computer vision that leverage the combined power of human and machine intelligence, with a particular attraction toward applications to problems in 3D.

#### **EDUCATION**

## University of Michigan

Ann Arbor, MI

Bachelor of Science in Engineering in Computer Science; GPA: 3.90

9/2016 - 5/2020

#### Coursework:

• Fall 2019 Deep Learning for Computer Vision

Winter 2018 Machine Learning, Video Game Design & Development

• Fall 2018 Computer Vision, Operating Systems

#### RESEARCH

## Crowds and Computer Vision for Privacy in Crowdsourced Applications

9/2018 - present

Leading a team in the U-M CROMA Lab on a project called CrowdMask. We propose a hybrid intelligence system for hiding private content in images used in crowd-powered applications by using human crowd workers to overcome limitations of object detection algorithms while those same models are used to assist the workers with pre-masked images.

#### Deep Generative Networks for Synthesizing 3D Assets for Video Games

9/2019 - 12/2019

Pursued an independent research project comparing generative network architectures on the problem of creating original 3D content for use in video games, and building a modified model best suited to this task. Gave a poster presentation on findings to the public.

#### PROFESSIONAL EXPERIENCE

#### Facebook, Inc.

Menlo Park, CA

Software Engineer Intern — Ads Conversion Experiences

5/2019 - 8/2019

- Developed an application to query multiple large databases in order to aggregate and display insights from advertiser data for use by multiple Ads teams within Facebook.
- Added substantial features in Hack and React to a tool for querying detailed ad metadata, allowing two large classes of data to become available within the interface.

# Crowds+Machines (CROMA) Lab, University of Michigan

Undergraduate Researcher, Advised by Professor Walter Lasecki

Ann Arbor, MI 9/2018 – present

• Project lead for the CrowdMask human-computer crowdsourced privacy system.

Indeed, Inc. Austin, TX

Software Engineer Intern — Chaos Engineering

5/2018 - 8/2018

- Developed and tested an application to automatically conduct surveys to collect data from internal users of the Chaos team's tools to determine how to improve them.
- Modernized the team's code base by adding automatic style checks, more robust integration testing, and interactive API documentation in the form of a web app.

# Northrop Grumman Corporation

McLean, VA

Software Developer Intern — COTS Product Group

6/2017 - 8/2017

• Created a technical and business plan for integrating the company's business process management software with blockchain and distributed ledger technologies.

#### AWARDS AND HONORS

U-M Engineering Dean's List	2016, 2017, 2018, 2019
U-M University Honors	2016, 2017, 2018, 2019
U-M James B. Angell Scholar	2018

# Eta Kappa Nu (HKN) Member, Beta-Epsilon Chapter

12/2017 - present

# **EXTRACURRICULAR ACTIVITIES**

WolverineSoft (game development organization)	9/2016 — present
Officer Corps	
• Historian	2017 - 2018
• Webmaster	2018 - 2019
• Treasurer	2019