

# CAMERON M. FABBRI

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<http://cameronfabbri.github.io>  $\diamond$  <https://github.com/cameronfabbri>

## WORK EXPERIENCE

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**Air Force Research Laboratory** - Associate Computer Scientist July 2015 - Present

NEXT: Contributed new machine learning algorithms to the NEXT crowdsourcing active learning framework

Tropel: Implemented an active learning detection by example technique to quickly train a multiclass classifier using a Support Vector Machine

RFPred: Developed a deep learning technique to extract radio frequency signal strength using Opencell data

**Clarkson University** - Research Assistant 2014 - 2015

Deployed a prototype application on Google Glass to control a Turtlebot2 and Husky robot using natural voice commands

**Lincoln Financial Group** - Software Developer 2013 - 2014

Developed a web application in PHP for a consistent way of creating, managing, and logging users for the MySQL Database

Developed a working prototype for the re-launch of the Lincoln4Benefits website using Java JSP and PL/SQL Procedures

## PUBLICATIONS

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Fabbri, Cameron, Md Jahidul Islam, and Junaed Sattar. "Enhancing Underwater Imagery using Generative Adversarial Networks." arXiv preprint arXiv:1801.04011 (2018). Accepted for publication ICRA 2018.

Fabbri, Cameron, and Junaed Sattar. "SmartTalk: A Learning-Based Framework for Natural Human-Robot Interaction." Computer and Robot Vision (CRV), 2016 13th Conference on. IEEE, 2016.

## EDUCATION

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**University of Minnesota** Expected May 2018

Masters of Computer Science, GPA: 3.7

Concentration: Deep Learning for Computer Vision

Master's Thesis: Image Enhancement using Generative Adversarial Networks

**Clarkson University** May 2015

Bachelors of Computer Science; Minor: Mathematics

## TECHNICAL SKILLS AND INTERESTS

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**Programming** Python, MATLAB, Java, BASH, LaTeX

**Tools** Tensorflow, Scikit, OpenCV, NLTK, MongoDB, MySQL

**Research Interests** Deep Learning, Computer Vision, Generative Models, Active Learning

## PROJECTS

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**Adversarial Immitation Learning** Present

Developing a Generative Adversarial Network based approach towards controlling a self driving car.

Testing is being done in simulation

**Generative Adversarial Networks** May 2017 - Present

Implemented various Generative Adversarial Networks publications for image generation:

GAN, LSGAN, EBGAN, WGAN, WGAN-GP

**Conditional Wasserstein GANs** Fall 2017

cWGANs allows varying amounts of control to the image generation process. This project explored altering attributes on human faces as well as generating galaxies with fixed morphological features

**Automatic Image Colorization** Spring 2017

Given a black and white photo, this project used a deep adversarial approach towards automatically colorizing it