ETHAN NELSON

(770) 689-7042 | einelson8i@gmail.com | linkedin.com/in/ethan-nelson/ | einelson.github.io

Education

Brigham Young University-Idaho   Apr 2021
BS. Science in Computer Science   *Rexburg, ID*

Advanced:
- Python/Machine Learning
- C++

Competent:
- Keras, TensorFlow, NumPy, Pandas
- HTML, CSS, JavaScript

Project Experience

Image Colorization   Nov 2019-Dec 2019
Student Project   *Rexburg, ID*
The purpose of this project was to train a convolutional neural network to predict the colored counter part of a black and white image.
- Trained a machine learning algorithm using an 800+ image database
- Deepened knowledge on Convolutional Neural Networks and image pre-processing by experimenting and researching relevant data
- Collaborated with team to maximize efficiency in preparing, training and modeling training data to speed up result time

EEG Eye-State Data Research   Jan 2020-Feb 2020
Personal Project   *Rexburg, ID*
The purpose of this project was to preform research on EEG data and see if I could create a Deep Neural Network that could accurately classify the data. Research was performed on EEG node locations and neural network activations
- Conducted and applied research in order to understand EEG data and how it works with machine learning
- Built and trained a network that could classify eye state data with a 94.53% accuracy

Work Experience

Data Annotator, Reviewer, Machine Learning Consultant   Feb 2020-Present
Research & Business Development Center   *Rexburg, ID*
To assist Lineage Logistics in data preparation. The goal here was to assist in preparing the data to train various Machine Learning algorithms in order to create a fully automated, machine run warehouse.
- Helped debug annotation tools pertaining to point cloud annotation to help create fully automated warehouse
- Contributed to 80,000+ image data set to train machine learning algorithm to maximize efficiency in recognizing barcodes on warehouse shipments
- Conducted research under a Machine Learning Engineer in order to increase working knowledge on machine learning algorithms specifically dealing with Neural Networks and Semantic Segmentation

Front-End Developer   Sep 2019- Feb 2020
House Cleaning Captains   *Rexburg, ID*
Assisted a local startup company in designing a website and increasing exposure
- Built website to increase public exposure and increased exposure by 200% through use of SEO
- Maintained and updated website to help company maintain a professional appearance as well as allow workers to view/manage appointments

Carpenter   Jul 2019- Feb 2020
Brigham Young University-Idaho   *Rexburg, ID*
Assisted in major university remodels including changing 1000+ doors campus wide, maintenance of ceiling and construction of shelving units
- Modified set plans to maximize efficiency in project execution by 100%
- Learned new skills pertaining to carpentry by listening and application in order to achieve professional results

Other Relevant

Amateur Radio Operator   March 2020 – Present
- Participated in ERC communication channel (Emergency radio communication East Idaho)

Volunteer Representative- 2 year assignment   Apr 2016 – Apr 2018
London, England
- Helped others set and plan to meet goals
- Dedicated time to serve others. Lead 6 other volunteers- trainings, overseeing statistics

Eagle Scout Recipient   Oct 2015
The Boy Scouts of America

Won nation-wide youth competition   Sept 2013
Instructables.com
- Used multiple technologies to create a creative home improvement project
- Use of 3-D printing, Raspberry Pi, Arduino, soldering, plexiglass