Snehal Shokeen

Linkedin

GitHub

Website

Objective

To implement Machine Learning and Deep Learning algorithms to solve real-life problems.

Experience

Computer Vision Engineer at Advanced Robotics UW, January 2020- Present

Responsible for training and testing deep learning models that will successfully complete the RoboMaster Power Rune challenge. My model's objective is to use computer vision and a mounted turret to accurately shoot five armored modules attached to a disk with a sinusoidal rotation speed.

Deep Learning Research, December 2019- Present

This research project with UW professor Georgy Manucharyan aims to demonstrate that Sea Surface Height (SSH) patterns of mesoscale turbulence contain enough information to predict eddy heat fluxes. I am responsible for automating the data collection of around 50,000 images (optical & infrared) and then using Tensorflow's CNNs to draw insights and make predictions.

STEM ASB Pipeline Project, Seattle, WA. December 2019- March 2020

Part of the STEM ASB team that designed the Water Science curriculum for high schools in Yakima County. Namely, Yakama National Tribal School, White Swan High School, CATS Academy, and PACE High School.

Projects

Julius Caesar Q&A Chatbot, November 2019

Used Nltk and Tensorflow's neural network capabilities to build a Julius Caesar Q&A chatbot that can compensate for spelling-errors and different ways of phrasing a question. This program does not use an existing framework. Code and demo can be found on Github: https://github.com/snehal-sas/CaesarChatbot. Watching demo highly recommended.

Arduino Motion Detecting Light System, September 2019

Used an Arduino Uno Rev3 microcontroller to build a light system that, using servos, flips a light switch on and off every time someone trips the motion detectors. As an additional feature, since the motion detectors use modulated Infrared rays to function, the motion detectors can be remotely triggered using TV remotes or RC car controllers. Code on Github: https://github.com/snehal-sas/ArduinoLightSystem.

Education

University of Washington- Computer Science. Graduation: 2023.

Coursework

Data structures and algorithms, Multivariable calculus, Differential equations, Introduction to Data Science, ML with Python

Skills

Fluent in Python and Java. Familiar with C++, R, and HTML.