ANTHONY LOWHUR
MACHINE LEARNING ENGINEER

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vanstorm9

EDUCATION

Rutgers University , New Brunswick
B.S. Computer Science 2019

Study Abroad: Tsuru University, Japan
Feb-Aug 2017

SUMMARY

Actively seeking summer '18 internships focused on machine learning or computer vision research and development

PROJECTS

AI ALGORITHMIC MELODY GENERATOR
- AI analyzes music structure from song to generate original music using LSTM neural networks.
- Attempting to make full AI song composer, an AI that can generate entire songs with a series melodies.

ROAD SEGMENTATION FOR AUTONOMOUS VEHICLES
- Used histogram backprojection and morphological filtering to preform road segmentation
- Able to recognize roads in noisy environment

MORE PROJECTS ON MY WEBSITE!

SKILLS

LANGUAGES: Python, C, C++, Java, Javascript, SQL, PHP, C#, MATLAB, HTML, CSS, Prolog, ASP Sparc

PLATFORMS + LIBRARIES: OpenCV, Sklearn, Pybrain, Tensorflow, Unity3D, Vuforia, Keras

HARDWARE: Leap Motion, Microsoft Kinect, Arduino, Raspberry Pi

EMPLOYMENT

RUTGERS UNIVERSITY, NEW BRUNSWICK
New Brunswick, New Jersey

Computer Vision & Machine Learning Research Assistant — Sep 2015 to Current

- Accomplished trash segmentation from beach with histogram backprojection, bag of words, and SVMs for autonomous drone.
- Investigated 3D object recognition algorithms that uses point cloud data extracted from the Microsoft Kinect.
- Used convolution neural networks and segmentation algorithms for object recognition & localization for Amazon Challenge Robot.
- Coordinated team of engineering students (senior undergraduate & master graduates) for the development of the autonomous robot.
- Currently evaluating segmentation and visualization algorithms on medical images.

TEXAS TECH UNIVERSITY
Lubbock, Texas

AI Research Intern — Jun 2016 to Aug 2016

- Achieved decentralized multi-agent intelligence that will surround and capture fleeing adversarial agent with team of ally agents.
- Abstract was accepted to the National Conference On Undergraduate Research (NCUR 2017) at the Memphis, Tennessee.

LEHIGH UNIVERSITY
Bethlehem, Pennsylvania

Computer Vision & Machine Learning Research Intern — Jun 2015 to Aug 2015

- Achieved emotion recognition, resistant to unique facial features and poor lighting, on a robot with dense optical flow and SVMs.
- Research paper presented and published as 1st author at the 2015 IEEE 12th International Conference (MASS) in Dallas, Texas.

FREELANCE WORK
Software Developer — Sep 2016 to Current

- Worked for various startups as a freelancer designing programs and products that utilize computer vision and machine learning.
- Accomplished success with multiple clients, making programs like sport ball trackers, clay pigeon tracker & hit/miss recognizer, video panorama generation algorithms, and recommendation engines.

PUBLICATIONS

Oct 2015

Dense Optical Flow Based Emotion Recognition Classifier
- 1st author paper publication on 2015
- IEEE 12th International Conference on Mobile Ad Hoc and Sensor Systems
- Anthony Lowhur (Rutgers), Mooi Choo Chuah (Lehigh)