

Raymond A. Sutrisno

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Education

•University of Houston (2016 - 2020)

Major: Bachelors of Computer Science, Minor: Mathematics, GPA 3.85

Skills

Programming Languages	Python, Java, C++, JavaScript
Web-Dev	HTML, CSS, NodeJS, ExpressJS, Postgresql, Jekyll
Cloud	GoogleCloud, Amazon Web Services
Tools	bash, git, Docker, make, linux/unix, L ^A T _E X, matlab
Machine Learning	ScikitLearn, Keras, Tensorflow, numpy, pandas, OpenCV

Job Experience

•NSF Research Assistant Internship, *University of Houston*

Summer 2018

- Topic: Image Classification of Dewetting Microscopy
- Implemented image processing techniques enhance and extract features from microscopy images of polymer dewetting.
- Techniques formalized into preprocessing pipeline for machine learning.
- Trained and tested various models such as SVM, Neural Networks, Random Forest.
- **project-link:** github.com/gtoti/Summer2018REU

•Research Assistant, *University of Houston*

Summer 2017

- Tasked with implementing "Query By Committee" active machine learning algorithms from research papers for galaxy distance estimation using photometric astronomical data.
- Paper: R. Vilalta, **R. Sutrisno**, E. E. O. Ishida, R. Beck, R. S. de Souza, A. Mahabal, "*Photometric Redshift Estimation: An Active Learning Approach*" IEEE SSCI 2017.

•Teaching Assistantships, *University of Houston*

Recurring

- (Spring 2019) Advanced Machine Learning (for Graduates)
- (Fall 2018) Introduction to Computer Science (for Undergrads)
- (Spring 2018) Artificial Intelligence (for Undergrads)
- (Fall 2017) Machine Learning (for Graduates)

Projects

Vision Tracking module for UH autonomous drone team

Spring 2018

- ImageNet based convolutional classifier for identifying ground targets for autonomous drone competition.

Keegan's Korner

Spring 2018

- 4chan like image board built using expressJS and Postgresql backend. Deployed as separate docker containers.

Reamer IP Bot

Fall 2018

- Discord bot used for WAN ip retrieval for house.
- Works as both a discord bot with command and a http server with JSON api.

Publications

•**R. Sutrisno**, R. Vilalta, A. Renshaw: "*A Machine Learning Approach for Dark-Matter Particle Identification Under Extreme Class Imbalance*" ADASS 2018

•R. Vilalta, **R. Sutrisno**, E. E. O. Ishida, R. Beck, R. S. de Souza, A. Mahabal: "*Photometric Redshift Estimation: An Active Learning Approach*" IEEE SSCI 2017

Awards

•S-STEM Scholarship Recipient (2018 - present)

•University of Houston Deans List (2017 - present)

•HP CodeWars 2016 3rd Place, *Hewlett Packard* March 2016

HP Code Wars Computer Science Competition in Houston, TX