

Yubo Zhang

✉ yubozhang@umass.edu | 📍 Amherst, MA

Education

University of Massachusetts Amherst

MS in ECE

Amherst

Jan. 2022 - present

NanTong University

BS in EE

NanTong, JiangSu Province, China

Sep. 2015 - Jun. 2019

Courses & Research

Research

Conducting Master's Thesis under the guidance of professor Sandip Kundu in the field of stealing parameters on model extraction attack of DNN models.

Machine Learning

Introducing the variety algorithms of machine learning, including linear regression, multivariate linear regression, logistic regression, SVM, decision tree, PCA, clustering.

Applied Machine Learning for the Internet of Things

Basic algorithm of machine learning, and the application on IoT, the basic architecture and usage of TensorFlow.

Hardware Design for Machine Learning Systems

A bridge between machine learning and hardware design, understand key machine learning concepts, study possible optimizations such as parallel operations, quantization, and systolic array.

Math Tools for Data Science

Mathematical tools needed for courses such as machine learning, data mining, neural networks. The included knowledge is Singular value decomposition, SVM, Markov chains, Page rank algorithms

Neuromorphic Engineering

Fundamental biological neuron models, algorithms, techniques, and software frameworks for implementing spike-based computation. I simply understand the principle of event-based camera, and optical flow algorithm for tracking movement by presentation and final project.

Robotics

The fundamental logic of robotics, such as actuation, kinematics, dynamics, PD control, path planning.

Awards and Honors

Graduation thesis

Excellent graduation thesis "Research on a Legal Monitoring Method Against Relay Selection."

NanTong, China

June. 2019

Scholarship

Won the single scholarship three times.

NanTong, China

Oct. 2015-Oct. 2018

Contest

First Prize in "BaoXin Cup" JiangSu Province Fourteenth College Student Physics and Experimental Technology Innovation Competition

NanTong, China

Oct. 2018

Contest

Second Prize in "America Mathematical Contest in Modeling"

NanTong, China

Apr. 2017

Honorary Title

"Outstanding Student Union Cadre"

NanTong, China

Jun. 2016

Technical Skills

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| Programming | Python, TensorFlow,..... |
| Professional Softwares | Pycharm, Google colab, |
| Typesetting | Office, L ^A T _E X, |

Volunteer Services

NanTong University

Counselor assistant

NanTong, China

Mar. 2016 - Jun. 2018

NanTong University Red Cross

Volunteer tutoring

NanTong, China

Mar. 2016 - Mar. 2017