# Zhenye Na

Urbana, IL 61801 • Tel: 475-300-8646

 $\bullet$ E-mail: zna2@illinois.edu  $\bullet$  Kaggle  $\bullet$  Github  $\bullet$  LinkedIn

Objective: Machine Learning & Data Scientist

# EDUCATION University of Illinois

Urbana-Champaign, IL

Master of Science, Advanced Analytics, May 2019

GPA: 3.9/4.0

Concentration in Computational Science & Engineering.

Related Coursework:

Data Structures, Algorithms, Machine Learning, Database Systems, Computer Vision,

Deep Learning.

# Dalian University of Technology (DUT)

Dalian, China

Bachelor of Engineer, Harbor, Waterway and Coastal Engineering, July 2017 GPA: 3.67/4.0

# TECHNICAL SKILLS

Languages: Python, Matlab/Octave, Java, R, C/C++, SQL, LATEX, Julia.

Web Development: HTML, CSS, JavaScript, PHP.

Applications: Git, SVN, VirtualBox, MySQL, InteliJ IDEA, Xcode.

# WORKING EXPERIENCE

Engineering Intern, Dalian Highway Construction Group

09/2016 - 11/2016

- Analyzed road maintenance data with VBA and realized data visualization in EXCEL.
- The final plan I participated in drawing successfully saved cost of road maintenance by 20%.

#### **PROJECTS**

#### Mining Rig Assembly

04/2018

Mining Rig Assembly is a web application that allows users to browse, store rig setups and estimate the performance of setups in an integrated website.

- Implemented with HTML, CSS, PHP and JavaScript in Cpanel environment.
- Designed database in MariaDB engine using data crawled from Amazon API.
- Added features like product information visualization tools, price notification and product payback period computation.

#### Music Generation using GAN and RBM

04/2018

- Preprocessed classical music in MIDI files and represented in matrix format for later use.
- Using GAN with LSTM units as generative model for creating new music.
- Improved music generation result using RBM model with Gibbs Sampling.

Pokemon GAN 03/2018

- Implemented DCGAN for generating new Pokemons in Tensorflow and Pytorch separately.
- Selected Wasserstein distance as the loss function and augmented dataset for more reconstruction options.

# Nonlinear Component Analysis as a Kernel Eigenvalue Problem

11/2017

- Outlined and implemented algorithm/Pseudo-code of Kernel function.
- Implemented USPS Handwriting Recognition via SVM given by KPCA and Simple PCA separately.

# LEADERSHIP

**Director**, DUT International Communication Association

10/2015-8/2017

Vice President, Student Union, Faculty of Infrastructure Engineering, DUT 9/2013-6/2015