HyeongChan Kim

http://kozistr.tech

EDUCATION Korea University of Technology and Education (KOREATECH) Mar 2016 –

CHALLENGES

6th place, NAVER NLP Challenge, SRL Task, 2018

& AWARDS 4th / 13th place, NAVER A.I Hackathon, 2018

Final Round (Digital Forensic), A.I R&D Challenge, 2018.

2nd place (Demon), **Boot2Root** CTF, 2018

2nd place (Demon), WhiteHat League 1, 2017

3nd place (SeoulWesterns), Harekaze CTF, 2017

9th place (3rd price, A book as award), TF-KR MNIST Challenge, 2017

Kaggle Challenges

LB Top 3%, Kannada MNIST Challenge (28 / 1214), 2019.

LB Top 4%, MNIST Challenge, 2017.

LB Top 5%, Titanic Challenge, 2017.

LB Top 12%, Plant Seedlings Classification, 2017.

LB Top 25%, Invasive Species Monitoring, 2017.

CTFs & Conferences

Conference Staff, POC, 2016

Staff, Challenge Maker, HackingCamp 15, 2017

Staff, Challenge Maker, CodeGate OpenCTF, 2017

Staff, Challenge Maker, HackingCamp 16, 2017

Challenge Maker, POX CTF, 2017

Challenge Maker, KID CTF, 2017

Staff, Belluminar CTF, 2017

Staff, Challenge Maker, HackingCamp 17, 2018

PUBLICATIONS

[2] Kim et al, CNN ARCHITECTURE PREDICTING MOVIE RATING FROM AUDIENCE'S

REVIEWS WRITTEN IN KOREAN. Jan. 2020.

[1] <u>zer0day</u>, Windows Anti-Debugging Techniques (CodeEngn Archive) Sep. 2016.

INDUSTRY EXPERIENCE

Rainist, Seoul, South Korea

Nov 2019 - Present

Machine Learning Engineer

- Developed the card & bank account transaction category classification models, designed light weight purpose for the low latency. (now in service)
- Developed the machine learning model serving RESTful API server (utilizing k8s + open source project).
- Working as a full-time.

VoyagerX, Seoul, South Korea

Jan 2019 - Sep 2019

Machine Learning Engineer

- Developed a robust speaker verification model for recognizing and diarizing the arbitrary speaker recorded from the noisy environment.
- Developed a hair image semantic segmentation / image in-paint / i2i domain transfer model for swapping hair domain naturally.
- Worked as an intern.

ELCID, Pangyo, Korea

Jun 2016 - Aug 2016

Penetration Test

- Tested a network firewall and anti-virus product.
- Worked as a part-time job.

OUT SOURCING

Korea University Course Information Web Parsing, ITL July 2017 – Mar 2018

AWS CloudTrail logger analyzer / formatter, ELCID Sep 2019 – Oct 2019

RESEARCH EXPERIENCE

Heterogeneous Parallel Computing Lab, Cheonan, Korea

Sep 2018 - Dec 2018

Undergraduate Research

• Wrote a paper about improved TextCNN model for predicting movie rate.

TALKS

NAVER NLP Workshop 2018, Pangyo, Korea

Dec 2018

• SRL Task, challenging without any domain knowledge

PROJECTS

Generative

Awesome Generative Adversarial Networks (Stars 460+)

July 2017 -

Implemented lots of Generative Adversarial Networks in tensorflow 1.x. Novelties of

this project are trying to implement lots of GANs which some of them are not released or in tensorflow 1.x based on the paper with some tweaks.

gan-metrics Mar 2020 –

Implemented lots of metrics for evaluating GAN in pytorch.

121 Translation

Improved Content Disentanglement Sep 2019

Re-implement / tune 'Content Disentanglement' paper in pytorch.

Image Inpainting

Improved Edge-Connect Oct 2019

Re-implement / tune 'Edge-Connect' paper in pytorch.

Style Transfer

Neural Image Style Transfer Mar 2018

Implemented a neural image style transfer.

Segmentation

Awesome Segmentation (Stars 55+) Aug 2018

Implemented lots of image semantic segmentation and ordered the papers.

Optimizer

AdaBound Optimizer (Stars 40+) Jan 2019

Implemented AdaBound Optimizer (Luo et al. 2019) w/ some tweaks in tensorflow.

RAdam Optimizer (Stars 2+) Sep 2019

Implemented RAdam Optimizer (Liu et al. 2019) w/ some tweaks in tensorflow.

Super Resolution

Deep Residual Channel Attention Network (Stars 35+) Sep 2018

Implemented a RCAN model in tensorflow.

Enhanced Super Resolution GAN (Stars 15+)

Jun 2019

Implemented an ESRGAN model in tensorflow.

NLP

Improved TextCNN (Stars 4+) Dec 2018

Implemented an improved TextCNN model (Kim et al. 2019)

Text Tagging Dec 2018

Implemented a text category classifier in tensorflow

R.L Rosseta Stone (Stars 400+) Sep 2018-

Hearthstone simulator using C++ w/ some R.L.

I contributed to this project by implementing 'feature extractor' and 'neural network' in libtorch++.

Speech Synthesis Tacotron Jan 2019

Implemented a google tacotron speech synthesis in tensorflow.