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 4%, Kaggle MNIST Challenge

LB Top 5%, Kaggle Titanic Challenge

LB Top 25%, Kaggle Invasive Species Monitoring

LB Top 10%, Kaggle Plant Seedlings Classification

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] <u>Kim</u> et al, CNN Architecture predicting Movie Rating. Jan. 2019.

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

INDUSTRY

Rainist, Seoul, South Korea

Nov 2019 - Present

EXPERIENCE Machine Learning Engineer

Working as a full-time.

VoyagerX, Seoul, South Korea

Jan 2019 - Sep 2019

Machine Learning Engineer

- Developing a robust Speaker Verification model and etc for recognizing and diarizing the arbitrary speaker recorded from the noisy environment.
- Developing a hair image semantic segmentation / image in-paint / i2i domain transfer model for swapping hair domain naturally.
- Working 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

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 in-domain knowledge

PROJECTS

Generative

Awesome Generative Adversarial Networks (Stars 440+)

July 2017 -

Implemented lots of Generative Adversarial Networks in tensorflow. Novelties of this project are trying to implement lots of GANs which some of them are not released or in tensorflow based on the paper with some tweaks.

121 Translation

Improved Content Disentanglement

Sep 2019

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

Image Inpainting Ir

Improved Edge-Connect

Oct 2019

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

Style Transfer Mar 2018 **Neural Image Style Transfer** Implemented a neural image style transfer. Segmentation Awesome Segmentation (Stars 45+) Aug 2018 Implemented lots of image semantic segmentation and ordered the papers. Jan 2019 **Optimizer** AdaBound Optimizer (Stars 35+) 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 30+)** Sep 2018 Implemented a RCAN model in tensorflow. **Enhanced Super Resolution GAN (Stars 10+)** 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

Rosseta Stone (Stars 350+)

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.

REFERENCES

R.L