HyeongChan Kim

https://github.com/kozistr, http://kozistr.tech/about

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

CHALLENGES & AWARDS

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

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% Flower Classification with TPUs (27 / 848), 2020.

LB Top 4% Bengali.AI Handwritten Grapheme Classification (67 / 2059), 2020.

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

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

INDUSTRY EXPERIENCE

Rainist, Seoul, South Korea   Nov 2019 – Jun 2020

Machine Learning Engineer

- Developed the card & bank account transaction category classification models, designed light weight purpose for the low latency. (now on service)

- Developed the machine learning model serving RESTful API server (utilizing k8s + open source project).
- Worked as a full-time.

VoyagerX, Seoul, South Korea   Jan 2019 – Sep 2019
Machine Learning Engineer
- Developed a speaker verification, a speaker diarization models & logic for recognizing the arbitrary speakers recorded from the noisy (real-world) 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
- Penetrated some products related to network firewall and anti-virus.
- 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 480+)**   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 (Stars 2+)   Mar 2020 –
Implemented lots of metrics for evaluating GAN in pytorch.

I2I Translation	**Improved Content Disentanglement (Stars 3+)**	Sep 2019
	Re-implement / tune 'Content Disentanglement' paper in pytorch.	
Image Inpainting	**Improved Edge-Connect (Stars 4+)**	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 60+)**	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 4+)	Sep 2019
	Implemented RAdam Optimizer (Liu et al. 2019) w/ some tweaks in tensorflow.	
Super Resolution	**Deep Residual Channel Attention Network (Stars 36+)**	Sep 2018
	Implemented a RCAN model in tensorflow.	
	Enhanced Super Resolution GAN (Stars 24+)	Jun 2019
	Implemented an ESRGAN model in tensorflow.	
	Natural and Realistic SISR w/ Explicit NMD (Stars 5+)	Apr 2020
	Implemented a NatSR model in pytorch.	
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 420+)**	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.	

Open Source Contributions	**syzkaller**	Apr 2018
	New Generation of Linux Kernel Fuzzer :: Minor contribution [#575](#)	
	simpletransformers	Apr 2020
	Transformers made simple w/ training, evaluating and prediction possible w/ one line each :: Minor contribution [#290](#)	