

HyeongChan Kim

<http://kozistr.tech>

EDUCATION	Korea University of Technology and Education (KOREATECH)	Mar 2016 –
CHALLENGES & AWARDS	<p>6th place, NAVER NLP Challenge, SRL Task, 2018</p> <p>4th / 13th place, NAVER A.I Hackathon, 2018</p> <p>Final Round (Digital Forensic), A.I R&D Challenge, 2018.</p> <p>2nd place (Demon), Boot2Root CTF, 2018</p> <p>2nd place (Demon), WhiteHat League 1, 2017</p> <p>3rd place (SeoulWesterns), Harekaze CTF, 2017</p> <p>9th place (3rd price, A book as award), TF-KR MNIST Challenge, 2017</p> <p>Kaggle Challenges</p> <p>LB Top 4% Flower Classification with TPUs (27 / 848), 2020.</p> <p>LB Top 4% Bengali.AI Handwritten Grapheme Classification (67 / 2059), 2020.</p> <p>LB Top 3%, Kannada MNIST Challenge (28 / 1214), 2019.</p> <p>CTFs & Conferences</p> <p>Conference Staff, POC, 2016</p> <p>Staff, Challenge Maker, HackingCamp 15, 2017</p> <p>Staff, Challenge Maker, CodeGate OpenCTF, 2017</p> <p>Staff, Challenge Maker, HackingCamp 16, 2017</p> <p>Challenge Maker, POX CTF, 2017</p> <p>Challenge Maker, KID CTF, 2017</p> <p>Staff, Belluminar CTF, 2017</p> <p>Staff, Challenge Maker, HackingCamp 17, 2018</p>	
PUBLICATIONS	<p>[2] <u>Kim</u> et al, CNN ARCHITECTURE PREDICTING MOVIE RATING FROM AUDIENCE'S REVIEWS WRITTEN IN KOREAN. Jan. 2020.</p> <p>[1] <u>zer0day</u>, Windows Anti-Debugging Techniques (CodeEngn Archive) Sep. 2016.</p>	
INDUSTRY	Rainist, Seoul, South Korea	Nov 2019 – Jun 2020

EXPERIENCE

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 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

- 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+) Implemented lots of metrics for evaluating GAN in pytorch.	Mar 2020 –
I2I Translation	Improved Content Disentanglement (Stars 3+) Re-implement / tune 'Content Disentanglement' paper in pytorch.	Sep 2019
Image Inpainting	Improved Edge-Connect (Stars 4+) Re-implement / tune 'Edge-Connect' paper in pytorch.	Oct 2019
Style Transfer	Neural Image Style Transfer Implemented a neural image style transfer.	Mar 2018
Segmentation	Awesome Segmentation (Stars 60+) Implemented lots of image semantic segmentation and ordered the papers.	Aug 2018
Optimizer	AdaBound Optimizer (Stars 40+) Implemented AdaBound Optimizer (Luo et al. 2019) w/ some tweaks in tensorflow.	Jan 2019
	RAdam Optimizer (Stars 4+) Implemented RAdam Optimizer (Liu et al. 2019) w/ some tweaks in tensorflow.	Sep 2019
Super Resolution	Deep Residual Channel Attention Network (Stars 36+) Implemented a RCAN model in tensorflow.	Sep 2018
	Enhanced Super Resolution GAN (Stars 24+) Implemented an ESRGAN model in tensorflow.	Jun 2019
	Natural and Realistic SISR w/ Explicit NMD (Stars 5+) Implemented a NatSR model in pytorch.	Apr 2020
NLP	Improved TextCNN (Stars 4+) Implemented an improved TextCNN model (Kim et al. 2019)	Dec 2018
	Text Tagging Implemented a text category classifier in tensorflow	Dec 2018
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	