

# HyeongChan Kim

<http://kozistr.tech>

EDUCATION	Korea University of Technology and Education (KOREATECH)	Mar 2016 –
CHALLENGES & AWARDS	<p>6<sup>th</sup> place, <b>NAVER NLP Challenge</b>, SRL Task, 2018</p> <p>4<sup>th</sup> / 13<sup>th</sup> place, <b>NAVER A.I Hackathon</b>, 2018</p> <p>Final Round (Digital Forensic), <b>A.I R&amp;D Challenge</b>, 2018.</p> <p>2<sup>nd</sup> place (Demon), <b>Boot2Root</b> CTF, 2018</p> <p>2<sup>nd</sup> place (Demon), <b>WhiteHat League 1</b>, 2017</p> <p>3<sup>rd</sup> place (SeoulWesterns), <b>Harekaze CTF</b>, 2017</p> <p>9<sup>th</sup> place (3<sup>rd</sup> price, A book as award), <b>TF-KR MNIST Challenge</b>, 2017</p> <p><b>Kaggle Challenges</b></p> <p>LB Top 3%, Kannada MNIST Challenge (28 / 1214), 2019.</p> <p>LB Top 4%, MNIST Challenge, 2017.</p> <p>LB Top 5%, Titanic Challenge, 2017.</p> <p>LB Top 12%, Plant Seedlings Classification, 2017.</p> <p>LB Top 25%, Invasive Species Monitoring, 2017.</p> <p><b>CTFs &amp; Conferences</b></p> <p>Conference Staff, <b>POC</b>, 2016</p> <p>Staff, Challenge Maker, <b>HackingCamp 15</b>, 2017</p> <p>Staff, Challenge Maker, <b>CodeGate OpenCTF</b>, 2017</p> <p>Staff, Challenge Maker, <b>HackingCamp 16</b>, 2017</p> <p>Challenge Maker, <b>POX CTF</b>, 2017</p> <p>Challenge Maker, <b>KID CTF</b>, 2017</p> <p>Staff, <b>Belluminar CTF</b>, 2017</p> <p>Staff, Challenge Maker, <b>HackingCamp 17</b>, 2018</p>	
PUBLICATIONS	<p>[2] <u>Kim</u> et al, CNN Architecture predicting Movie Rating. Jan. 2019.</p> <p>[1] <u>zer0day</u>, Windows Anti-Debugging Techniques (CodeEngn Archive) Sep. 2016.</p>	
INDUSTRY	Rainist, Seoul, South Korea	Nov 2019 – Present

## EXPERIENCE

### Machine Learning Engineer

- Developed the card & bank account transaction category classification models, designed light weight purpose for the low latency.
- 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 450+)**

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.

### I2I Translation

### **Improved Content Disentanglement**

Sep 2019

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

<b>Image Inpainting</b>	<b>Improved Edge-Connect</b> Re-implement / tune 'Edge-Connect' paper in pytorch.	Oct 2019
<b>Style Transfer</b>	<b>Neural Image Style Transfer</b> Implemented a neural image style transfer.	Mar 2018
<b>Segmentation</b>	<b>Awesome Segmentation (Stars 50+)</b> Implemented lots of image semantic segmentation and ordered the papers.	Aug 2018
<b>Optimizer</b>	<b>AdaBound Optimizer (Stars 35+)</b> Implemented AdaBound Optimizer (Luo et al. 2019) w/ some tweaks in tensorflow.	Jan 2019
	<b>RAdam Optimizer (Stars 2+)</b> Implemented RAdam Optimizer (Liu et al. 2019) w/ some tweaks in tensorflow.	Sep 2019
<b>Super Resolution</b>	<b>Deep Residual Channel Attention Network (Stars 30+)</b> Implemented a RCAN model in tensorflow.	Sep 2018
	<b>Enhanced Super Resolution GAN (Stars 10+)</b> Implemented an ESRGAN model in tensorflow.	Jun 2019
<b>NLP</b>	<b>Improved TextCNN (Stars 4+)</b> Implemented an improved TextCNN model (Kim et al. 2019)	Dec 2018
	<b>Text Tagging</b> Implemented a text category classifier in tensorflow	Dec 2018
<b>R.L</b>	<b>Rosseta Stone (Stars 380+)</b> Hearthstone simulator using C++ w/ some R.L. I contributed to this project by implementing 'feature extractor' and 'neural network' in libtorch++.	Sep 2018-
<b>Speech Synthesis</b>	<b>Tacotron</b> Implemented a google tacotron speech synthesis in tensorflow.	Jan 2019