

# HyeongChan Kim

<http://kozistr.tech>

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

- 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 410+)**

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.

### Style Transfer

**Neural Image Style Transfer**

Mar 2018

Implemented a neural image style transfer.

### Segmentation

**Awesome Segmentation (Stars 40+)**

Aug 2018

Implemented lots of image semantic segmentation and ordered the papers.

### Optimizer

**AdaBound Optimizer (Stars 30+)**

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 30+)**

Sep 2018

Implemented a RCAN model in tensorflow.

**Enhanced Super Resolution GAN (Stars 9+)**

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 330+)**

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**