

## Research Interest

- Computer Vision, Vision and Language, Audio-Visual Learning, Transfer Learning, Mixed Reality

## Education

### Seoul National University (SNU)

Seoul, Korea

INTEGRATED MS / PH.D PROGRAM IN COMPUTER SCIENCE AND ENGINEERING

Mar. 2015 – Feb. 2021 (Expected)

- Vision and Learning Lab (Advisor: Gunhee Kim)

### Seoul National University (SNU)

Seoul, Korea

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Mar. 2009 - 2015

- 2010 – 2012, Compulsory Military Service. Served as a sergeant in R.O.K Marine Corp.

## Publications

### INTERNATIONAL CONFERENCE

- |      |   |                          |
|------|---|--------------------------|
|      | <b>Youngjae Yu</b> , Jongseok Kim, Heeseung Yun, Jiwan Chung and Gunhee Kim, <i>Character Grounding and Re-Identification in Story of Videos and Text Descriptions</i>  | ECCV 2020<br>(Spotlight) |
| 2018 | <b>Youngjae Yu</b> , Jongseok Kim and Gunhee Kim, <i>A Joint Sequence Fusion Model for Video Question Answering and Retrieval</i>   | ECCV 2018                |
|      | Sangho Lee, Jinyoung Sung, <b>Youngjae Yu</b> and Gunhee Kim, <i>A Memory Network Approach for Story-based Temporal Summarization of 360° Videos</i>  | CVPR 2018                |
|      | <b>Youngjae Yu</b> , Sangho Lee, Joonil Na, Jaeyun Kang, Gunhee Kim, <i>A Deep Ranking Model for Spatio-Temporal Highlight Detection from a 360° Video</i>  | AAAI 2018                |
| 2017 | <b>Youngjae Yu</b> , Jongwook Choi, Yeonhwa Kim, Kyoung Yu, Sang-hun Lee, Gunhee Kim, <i>Supervising Neural Attention Models for Video Captioning by Human Gaze Data</i>                                      | CVPR 2017                |
|      | <b>Youngjae Yu</b> , Hyungjin Ko, Jongwook Choi, Gunhee Kim, <i>End-to-end Concept Word Detection for Video Captioning, Retrieval, and Question Answering</i>   | CVPR 2017<br>(Spotlight) |
|      | Yunseok Jang, Yale Song, <b>Youngjae Yu</b> , Youngjin Kim, Gunhee Kim, <i>TGIF-QA: Toward Spatio-Temporal Reasoning in Visual Question Answering</i>   | CVPR 2017<br>(Spotlight) |
| 2016 | Inuk Jung, Kyuri Jo, Hyejin Kang, Hongryul Ahn, <b>Youngjae Yu</b> , Sun Kim, <i>TimesVector: A Vectorized Clustering Approach to the Analysis of Time Series Transcriptome Data from Multiple Phenotypes</i> | GIW 2016                 |

### JOURNAL

- |      |   |                        |
|------|---|------------------------|
| 2019 | Yunseok Jang, Yale Song, Chris Dongjoo Kim, <b>Youngjae Yu</b> , Youngjin Kim, Gunhee Kim, <i>Video Question Answering with Spatio-Temporal Reasoning</i>   | IJCV 2019              |
| 2017 | Inuk Jung, Kyuri Jo, Hyejin Kang, Hongryul Ahn, <b>Youngjae Yu</b> , Sun Kim, <i>TimesVector: A Vectorized Clustering Approach to the Analysis of Time Series Transcriptome Data from Multiple Phenotypes</i> | Bioinformatics<br>2017 |

### WORKSHOP PAPERS

2020	Jongseok Kim *, <b>Youngjae Yu</b> *, Seunghwan Lee, Gunhee Kim, (* is equal contribution.), <i>Cycled Compositional Learning between Images and Text</i>	CVPR 2020 CVFAD
	Hankyol Lee, <b>Youngjae Yu</b> , Gunhee Kim, <i>Augmenting Data for Sarcasm Detection with Unlabeled Conversation Context</i>	In ACL 2020, FLP
2019	<b>Youngjae Yu</b> , Seunghwan Lee, Yunchael Choi, Gunhee Kim, <i>CurlingNet: Compositional Learning between Images and Text for Fashion IQ Data</i>	ICCV 2019 CVFAD
2017	Seil Na, <b>Youngjae Yu</b> , Sangho Lee, Jisung Kim, Gunhee Kim, <i>Encoding Video and Label Priors for Multi-label Video Classification on YouTube-8M dataset</i>	CVPR 2017 & YouTube-8M
2016	<b>Youngjae Yu</b> , Hyungjin Ko, Jongwook Choi, Gunhee Kim, <i>Video Captioning and Retrieval Models with Semantic Attention</i>	ECCV 2016 LSMDC & VisStory
<b>THESIS</b>		
2015	<b>Youngjae Yu</b> , Sun Kim, <i>Correlation Based Feature Selection and Pattern Clustering Method for Time Series Gene Expression Data of Drought Stressed Rice</i>	B.S. Thesis

## Professional Experience

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2018-2020	<b>Software Engineer, Research Scientist</b> , RippleAI
2015-2018	<b>Graduate Teaching Assistant</b> , Seoul National University
2018	<b>Research Intern</b> , Redmond, Microsoft
2017	<b>NAVER PhD Fellowship</b> , Naver
2018	<b>Lecture Instructor</b> , Samsung DS Artificial Intelligence course : NLP and Vision
2012-2014	<b>Undergraduate Research Assistant</b> , Seoul National University

## Honors & Awards

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2020	<b>130K \$ investment</b> , Leader of RippleAI Team, AI Challenge-NIPA	Seoul, Korea
2020	<b>1st prize</b> , DramaQA Challenge	ECCV 2020
2020	<b>1st prize</b> , Fashion IQ 2020 Challenge	CVPR 2020
2020	<b>1st prize</b> , Sarcasm detection shared task - The Second Workshop on Figurative Language Processing	ACL 2020
2019	<b>2nd prize</b> , Fashion IQ 2019 Challenge	ICCV 2019
2019	<b>1st prize</b> , Large Scale Movie Description and Understanding Challenge (LSMDC 2019)	ICCV 2019 CLVL
2017	<b>Fellowship</b> , NAVER PhD Fellowship award	NAVER
2018	<b>Google Travel Grants</b> , Grant recipient for attending ECCV 2018 (Munich, Germany)	Google
2018	<b>Kakao Travel Grants</b> , Grant recipient for attending ICLR 2018 (Vancouver, Canada)	Kakao
2017	<b>1st prize</b> , Movie Annotation and Retrieval track, Movie Fill-in-the-Blank track - Large Scale Movie Description and Understanding Challenge (LSMDC 2017)	ICCV 2017 LSMDC & MovieQA
2016	<b>1st prize</b> , Movie Annotation and Retrieval track, Movie Fill-in-the-Blank track - Large Scale Movie Description and Understanding Challenge (LSMDC 2016)	ECCV 2016 LSMDC & VisStory

## Professional Development

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### Academic Activities

#### REVIEWER

- Conference, Journal (CVPR, ECCV, ICCV, ACCV, AAAI, ICMI, MM)
- Workshop Reviewer (LUV (2019))

## **Other Skills**

### **PROGRAMMING**

- Programming Languages. Python, R, C/C++, Java, Shell scripts (bash, zsh), Matlab, Ocaml
- ML/DL Frameworks. TensorFlow, PyTorch, Caffe
- Operating Systems. Linux (Ubuntu), macOS, Windows
- Other Tools and Skills. Git, Latex, Vim

## Teaching Experience

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2019	<b>Mentoring</b> , Multimodal Learning for Videos	<i>RippleAI</i>
2018	<b>Teaching Assistant</b> , Samsung DS <sup>2</sup> Artificial Intelligence course : NLP and Vision	<i>SNU</i>
2017	<b>Workshop Instructor</b> , Resource development : Theory and Application of Deep Learning	<i>SNU</i>
2017	<b>Lecture Instructor</b> , Seoul Big Data Academy : Tensorflow basic, CNN, RNN	<i>SNU</i>
2017	<b>Lecture Instructor</b> , SKT Academy : Tensorflow basic, Introduction to CNN,RNN	<i>SNU</i>
2017	<b>Teaching Assistant</b> , Big Data Academy : Introduction to RNN	<i>SNU</i>
2016	<b>Teaching Assistant</b> , 4190.773 : Probabilistic Graphical Model	<i>SNU</i>
2015	<b>Teaching Assistant</b> , 4190.307 : Operating System	<i>SNU</i>
2015	<b>Teaching Assistant</b> , M1522.001000 : Computer Vision	<i>SNU</i>