# Yoojin Kim

<u>luciaicul@kaist.ac.kr</u> | <u>linkedin.com</u> | github.com

#### Education

#### Korea Advanced Institute of Science and Technology (KAIST)

Aug. 2018 - Present

M.S. in Graduate School of Culture Technology, Music and Audio Computing Lab.

#### Yonsei University, Seoul

B.S. in Computer Science

Mar.2014 - Aug.2018 3.76/4.3 (4.02/4.3 in major)

#### Research Interests

Data Science, Machine Learning, Deep Learning, Music Information Retrieval, Music Perception and Cognition

#### Thesis

Analysis of Performance Features According to Emotional Expression in Classical Piano Music M.S. thesis, KAIST, 2021

#### **Publications**

#### **Papers**

- VirtuosoNet: A Hierarchical RNN-based System for Modeling Expressive Piano Performance D.Jeong, T.Kwon, Y.Kim, K.Lee and J.Nam

  Proceedings of the 20th International Society for Music Information Retrieval Conference (ISMIR), 2019
- Graph Neural Network for Music Score Data and Modeling Expressive Piano Performance D.Jeong, T.Kwon, Y.Kim, and J.Nam

  Proceedings of the 36th International Conference on Machine Learning (ICML), 2019
- Score and Performance Features for Rendering Expressive Music Performances D.Jeong, T.Kwon, Y.Kim, and J.Nam Proceedings of the Music Encoding Conference, 2019

#### **Patents**

• Method and Device for Multi-style Conditioned Expressive Piano Performance Rendering J.Nam, D.Jeong, T.Kwon, <u>Y.Kim</u>, (Filing) 10-2020-0070101, 2020

#### Academic Talk

#### Domestic

• Analysis of Performance Features According to Emotional Expression in Classical Piano Music Y.Kim, J.Park, D.Jeong, T.Kwon, and J.Nam

Korean Society of Music Perception and Cognition, 2020

# **Projects**

Music Data Sentiment Analysis	2019 - Present
$Samsung \ Science \ \mathcal{E} \ Technology \ Foundation, \ Music \ and \ Audio \ Computing \ Lab, \ KAIST$	Advisor: Juhan Nam
Expressive Performance Generation	2019
$Samsung \ Science \ \mathcal{E} \ Technology \ Foundation, \ Music \ and \ Audio \ Computing \ Lab, \ KAIST$	Advisor: Juhan Nam
Data Oversampling for Session-based Purchase Prediction & Explanation	2018

# Haptic Retargeting using Sensors and VR Device

Data Intelligence Lab, Yonsei University

2017

Advisor: Seung-won Hwang

Computer Graphics and Applications Lab, Yonsei University

Advisor: In-kwon Lee

#### Awards and Honors

# VR/AR Grand Challenge Award

Korea VR Festival 2019

High Honor Award 2018, 2017

Academic Achievement Award for high grade students, Yonsei University

## The National Scholarship for Science and Engineering

2017

National scholarship for undergraduates with strong academic performance in science and engineering

# **Experiences**

#### Exhibition

• Deep Space Music in Ways of Seeing NOS Visuals and KAIST Mac Lab, Daejeon Museum of Art Special Exhibition, Nov 2019 - Jan 2020

## Teaching Experience

- Instructor, Data Processing using Python, KAIST IT Academy, Oct 2020 Dec 2020
- Instructor, C++ language, KAIST IT Academy, Dec 2019 Mar 2020
- Instructor, C language, KAIST IT Academy, Jun 2019 Dec 2019
- TA, GCT501 Introduction to Culture Technology, KAIST GSCT, Spring, Fall 2019
- TA, CS101 Introduction to Programming, KAIST CS, Fall 2018

#### Interns

- Research Intern, Computer Graphics and Applications Lab, Yonsei University, Summer 2017
- Research Intern for Data Analysis, Yonsei University Severance Hospital, Summer 2015

#### **Technical Skills**

**Programming**: Python, C/C++, Java

Data Science: PyTorch, Tensorflow, pandas, scikit-learn, MySQL

**Developer Tools**: Git, Docker

#### **Extra-Curricular Activities**

Amateur Cellist 2019 - Present

Festival Ensemble Gaudium

Amateur Violist 2014 - 2018

Yonsei Amateur Orchestra principal in 2015

#### Reference

#### Juhan Nam

Associate professor, Graduate School of Culture Technology, KAIST (contact)

2019