GunGyeom James Kim

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# **EDUCATION**

Northeastern University - Roux Institute, Portland, ME Aug 2021 - Present MS in Computer Science Candidate GPA: 4.0 / 4.0 SangMyung University, Seoul, South Korea March 2013 - April 2020 BS in Mathematics Education GPA: 3.53 / 4.5 SangMyung University, Seoul, South Korea March 2013 - April 2020 BK in Sports Health Management GPA: 3.53 / 4.5

### TECHNICAL KNOWLEDGE

Languages: C++, C, Java, Python

Tools & Frameworks: Git, Scikit-learn, tex, openCV

Database: mySQL

# **PROJECTS**

# Segmentation of invasive plant using CNN

Jan 2022 - Apr 2023

Northeastern University - Roux institute

- o Fintuned U-Net, convolutional neural network, to create a segmentation of invasive plant in Cape Elizabeth, Maine
- o Created the pipeline to load and preprocess the data
- o Analyzed loss functions and performance of the network

#### Dashboard of Bioscience Ecosystem in Maine

Oct 2022 - Dec 2022

Northeastern University - Roux institute

- o Created Dashboard of Bioscienc Ecosystem in Maine using Observable (javascript based tool) and Gitpage
- o Built geographical map of maine via Maplibre API and several graph serving different purposes
- o Designed Database in mySQL scheme and data structure in backend

## Relational Database of Crossfit

Oct 2022 - Dec 2022

Northeastern University - Roux institute

- o Generated Relational Database of Crossfit using mySQL
- o Populated four tables, WOD/Movement/Motion/Muscle following third Normal Form

#### API for NLP and EDA on Education ACTION Forum of Maine Conversation Data Set

June 2022 - Aug 2022

Northeastern University - Roux institute

- o Performed NLP and EDA (tuning stopwords, lemmatizing, term frequency, inverse document frequency) on Education ACTION Forum of Maine Conversation Data set and visualized result using WordCloud in python
- o Utilized real-time data with LVN API
- o Constructed intuitive API and documented well for successor

# Northeastern University - Roux institute

June 2022 - Aug 2022

- o Implemented K-Nearest-Neighbor Algorithm from scratch and visualized with Animation in python
- o Assembled various weight function for algorithm, uniform, distance, squared distance and rank
- o Benchmarked performace with KNN function in Sci-kit

# WORK EXPERIENCE

KNN algorithm

## Attached Girl's Highschool to College of Education, SangMyung University

Seoul, South Korea

Math Teacher - Trainee

April 2019 - May 2019

o Taught Math 1 to 10th grader and discussed my and others lecture

#### Hansol Academy

Seoul, South Korea

Math Instructor

May 2018 - April 2019

o Taught from 7th to 10th grader

## HONORS AND AWARDS

Presenter of Khoury 40th Anniversary in Roux(2023), SM-IN Core Competency Accreditation(2020), Excellence Award in 11th Pre-Tehacer Teaching Competency Contest (2018)