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#### **EDUCATION**

**Amherst College,** Amherst, MA | Bachelor of Arts in Statistics and Computer Science

Expected May 2023

- Cumulative GPA: 3.96/4.00, Statistics GPA 4.00/4.00, CS GPA 4.00/4.00
- Relevant Coursework: Data Science, Multivariate Data Analysis, Introduction to Computer Science I&II, Introduction to Statistics with Modeling, Multivariate Calculus, Intermediate Calculus

#### **Supplemental Education**

January – February 2020

Fast Campus | Data Science: Machine Learning Bootcamp

#### RESEARCH EXPERIENCE

#### **Cultural Heritage Administration of Korea**

March – August 2015

Cultural Heritage Public Policy Competition, 2<sup>nd</sup> Place

- Identified existing problems in Korea's national tourism policy on the basis of statistical evidence discovered from research on tourist behavior
- Formulated a policy proposal on targeting different segments of tourists to promote cultural heritage tourism
- Interacted with policy experts and representatives from the Administration to implement the proposal as policy alternatives

# Hankuk Academy of Foreign Studies, South Korea

January 2015 – March 2016

Senior Thesis (https://github.com/hailinkim/thesis)

- Analyzed foreign tourists' mobile phone call record data set to examine their travel behaviors in Seoul, Korea
- Performed hierarchical clustering and created data visualization on a heat map based on the tourists' relative density at each location, using R and QGIS
- Deployed Tableau to create a dashboard that tracks how travel patterns differ by nationality and spatiotemporal factors
- Provided data-driven solutions to address inconveniences often experienced by foreign tourists, such as poorly-planned public transportation route
- Free and Open Source Software for Geospatial (FOSS4G) 2015 Conference Academic Track Best Oral Presentation Student Award
- Published in the Proceedings of FOSS4G 2015 Conference
- Korea Spatial Information Society Spring Conference 2015 Best Thesis Award

#### **PROJECTS**

# Calendar: How Do I Spend My Time? (https://github.com/hailinkim/stat231 Calendar)

Fall 2020

- Constructed an R Markdown report that addresses the question 'How I spend my time' based on the analysis of data set exported from Google calendar
- Wrangled the data and created data visualizations, using R dplyr and ggplot2 packages

# **S&P 500 Stock Price** (https://github.com/hailinkim/stat231 stockprice)

Fall 2020

- Collaborated with a team of three to develop an interactive web application that allows users to investigate the performance of the S&P 500 stock, using R Shiny package
- Utilized quantmod package in R to scrape the stock price and PE ratio data from Yahoo Finance

### Bike Share Demand Prediction (https://github.com/hailinkim/bikeshare)

Fall 2018

- Analyzed the Kaggle data set collected by the bike share system and generated multiple linear regression models in R, to predict bike rental demand based on weather and temporal factors
- Performed a permutation test to evaluate the statistical significance of the models

# ADDITIONAL EXPERIENCE

# Amherst College, Amherst, MA

September - December 2018

Course Grader, Mathematics Department

Assisted Professor Danielle Benedetto in grading 30+ problem sets weekly for Intermediate Calculus course, providing critical feedback to students

### Shoyu Club Japanese Language Study | Ishikawa, Japan

June - August 2018

**Fellowship** 

- Awarded scholarship for 5-week immersive Japanese language program in Kanazawa, Japan
- Experienced Japanese culture through hands-on activities and gained comparative perspectives on East Asian culture
- Lived with host family, and learned to speak Japanese in everyday interactions and understand the local customs

# Yangji Children's Library

August 2013 - January 2016

Mentor

Held individually-tailored tutoring for children from immigrant families to help them adjust to school

# PROGRAMMING SKILLS

- Proficient: Java, R, Git
- Familiar: Tableau, Python, HTML, CSS, JavaScript
- Portfolio website: <a href="https://hailinkim.github.io/AKwebsite/">https://hailinkim.github.io/AKwebsite/</a>