

# Hailin Angelica Kim

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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](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](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/stat230\\_bikeshare](https://github.com/hailinkim/stat230_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: <https://hailinkim.github.io/AKwebsite/>