

Jin-Seo Bae

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Skills

Programming Languages: Python, R, HTML/CSS, JavaScript, MySQL, Tableau, NLTK, Django | **Languages:** English, Korean

Microsoft Office: Word, Visio, PowerPoint, Excel | **Operating Systems:** Linux, Window

Experience

Information Science / Biomedical Informatics Intern, Michigan Emergency Medicine Research

Feb 2020 - Present

Data Research Associate, Emergency Medicine Education & Research by Global Experts (EMERGE) project

- Create taxonomy evaluation algorithms using Python to categorize reasons for Emergency Department visits and final diagnoses from 16 different countries.
- Create a table in a relational database using MySQL for chief complaints, including the metadata that needed to establish the data provenance
- Compare and apply taxonomies of categorization to research datasets ranging in size and scope
- Assist Dr. Medlin in mapping different clinical terminologies for international usage by generating SNOMED CT and ICD-10 codes

Research Assistant, The Learning, Education, and Design (LED) Lab at University of Michigan

Jan 2020 - Present

Data researcher, My Learning Analytics (MyLA) Project

- Implement learning analytics data to analyze datasets of 3 different semesters. Created appropriate *coding* per category
- Collaborate effectively with the team to help future research and improve the dashboard visualizations: Files Accessed, Assignment Planning, Grade Distribution
- Created a codebook of parent and child categorization for Python to analyze

Database-Program Management Intern, Lutheran Campus Ministry STEP Center

Oct 2018 - May 2019

- Created database systems using Microsoft Excel to evaluate the participation of volunteers and clients, learning outcomes, and production inventory
- Performed data analysis with assessment reports with database collected from several projects in LCM STEP Center, including literacy classes for refugees, youth mentoring, and women's empowerment sewing cooperative

Undergraduate Teaching Assistant, School of Information, Syracuse University

Aug 2018 - Dec 2018

Introduction to Networking System, General Networking System Lab

- Led 5 different weekly lab sessions. Assisted three professors with lab work by preparing and testing specimens before the lab sessions
- Managed and provided support to more than 100 students, guiding proper data collection, writing lab reports and statistics

Projects

Data Analysis and Manipulation, School of Information at University of Michigan

Spring 2020

COVID-19 Project

- Used Python to analyze predictive symptoms of COVID-19 and age-group risk
- Assessed recovery rate in the five most affected countries, comparing the number of confirmed, active, deaths, and recovered cases

Information Visualization, School of Information at University of Michigan

Spring 2020

COVID-19 Project

- Created a website using JavaScript, visualizing COVID-19 statistics worldwide with dataset from Johns Hopkins University
- Compared to the number of deaths and confirmed cases by country with that of mainland China and Italy

2020 Election Prediction

- Created a website using HTML/CSS and Tableau, modeling and forecasting the 2020 US presidential election
- Used the U.S. map visualization to show parties winning in states and forecasted candidate shares

Introduction to Applied Data Science, School of Information at Syracuse University

Spring 2019

Airplane Customer Rating Data

- Cleansed, visualized, and analyzed given air-travel data by using R. Found which group showed the most negative reaction toward their experience and analyzed the ways to fix them by using data visualization

Scripting for Data Analysis

Spring 2018

NY Environment Rating Data

- Used Python to solve challenging questions for data scripting in competition with graduate students. Found why specific areas are polluted and analyzed different kinds of chemical effects on people residing in the NY state area

Education

University of Michigan, School of Information, Ann Arbor, MI

Expected graduation: May 2021

MS in Information, Data Science and Analytics track

GPA: 3.90

Coursework: Programming I, Intermediate Programming, Intro Stat & Data Analysis, Des of Comp Websites, SQL & Databases, Data Man & Analysis, Info Visualization, Applied Machine Learning, Building Interactive Applications

Syracuse University, School of Information Studies, Syracuse, NY

Aug 2016 - May 2019

BS in Information Management and Technology (IM&T)

GPA: 3.75

Dean's list: Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019

Leadership & Volunteer

A2 Data Dive, *Treasurer*, School of Information at the University of Michigan

Fall 2019-Spring 2020

Koreans in Information Technologies, *Fiscal Agent*, School of Information at Syracuse University

Fall 2018-Spring 2019

Boaz, *Teaching Assistant*, Syracuse, NY

Spring 2019