

Joowon Kim

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EDUCATION

University of Illinois at Urbana-Champaign

May 2021

Bachelor of Science, Computer Science and Economics

GPA: 3.54/4.0

Skills: Data Science, Web Development, Software Engineering, Python, C++, Javascript, Java, Git, PostgreSQL, Django

Coursework: Data Structures and Algorithms, Discrete Structures, Regression Analysis, Statistics, Differential Equations

Fall Coursework: Computer Architecture, Prog Data Science, Applied Linear Algebra, Inter Microeconomic Theory

EXPERIENCE

State Farm

Data Science Intern (Part-Time)

August 2019 – Present

- Optimizing clustering algorithms in Jupyter Notebook, using Python and the scikit-learn and ProcessMining libraries
- Exploring various methods to optimize runtime for >18GB files and ~400 different vector combinations.
- Congregating different claims processes based on agglomerative clustering, vector distance, and the LDA model
- Utilizing company-patented techniques to innovate new ways in providing efficient statistical models for claims.

State Farm

Software Engineering Intern

May 2019 – August 2019

- Constructed corporate data analytics portal using Javascript, Python, Django, PostgreSQL, JSON, and pandas
- Developed analysis tool in software, increasing the efficiency of data search functionality by 100%
- Redesigned information storage in PostgreSQL database to improve analysis for ~1000 data-layered maps
- 2nd biggest contributor to the application, to be used by 6,000+ State Farm executives to make corporate decisions

CS 196 at UIUC

Director of Project Management

August 2018 – Present

- Directing all the project managers for the software development groups at CS 196 Honors course
- Managing as scrum master using skills such as Python, Java, machine learning and front-end development
- Installed new grading system and hiring/interview methods improving the way quality project managers are accepted

PROJECTS

AWS Email Bot

July 2019

- Built a Python script using libraries such as schedule and smtplib to develop a subscription-type email bot
- Running the script continuously for 100 days by implementing the Amazon Web Services' EC2 instance
- Implemented data structures supporting constant runtime, making user data processing easier and more efficient

BriovaRx Patient Center Application

February 2019

- Placed Top 3 for UnitedHealth Group's Challenge at HackIllinois 2019
- Designed using Apache Cordova and Javascript, with separate p2p data channel video chat demo with WebRTC
- A proof of concept to be potentially used for self-diagnosis of 1000s of chronically diseased patients.

Cryptocurrency Arbitrage Web-Application

January 2018 – August 2018

- Implemented ccxt Python library to simulate trades in current cryptocurrency market through an arbitrage algorithm
- Designed web-app using Django framework and python for backend-integration, along with HTML/CSS for front end
- Deployed the application through the Heroku cloud platform to be able to access web-app externally

CAMPUS INVOLVEMENT

Engineering Council Leadership Committee at UIUC

August 2017- May 2018

- Organized events happening within engineering college such as fairs, conferences, and talks
- Exercised soft skills in order to effective relay communications between different groups within the council

INTERESTS AND HOBBIES

Playing basketball or golf, losing in fantasy sports, going to social events, and gaming