In Sung Jang

Research Data Scientist at UChicago

hanlbomi@gmail.com · 312-709-6783 · Schaumburg, IL · Linkedin · Portfolio

---

Qualification Summary

Experienced data scientist with over five years of expertise in analyzing extensive datasets and quantitative research in astronomy. Proficient in programming languages, machine learning techniques, and data visualization. Skilled in working within highly technical environments and collaborating with cross-functional teams.

Technical Expertise

- ***Machine Learning***
  - Certificates in Coursera specializations : (1) Deep Learning Specialization (Univ. of North Texas), (2) Python for Data science, AI & Development (IBM), and (3) Learn SQL Basics for Data Science Specialization (Univ. of Calibornia, Davis)
  - Applied Python sklearn and pandas packages to real-world, often uncleaned and semi-structured data
- ***Statistics***: Probability, Distributions, ML methods, Hypothesis testing
- ***Relational Databases***: ERs, Table normalization; SQL joins, Table creation & row inspection
- ***Programming languages***: Python, SQL, R, Matlab, IDL
- ***Software***: MS office, equivalent Apple products and Tableau; Linux/Terminal environment
- ***Scientific Writing***: 10 first-author publications with >300 citations (top 1% of the most cited work)

Professional Experience

University of Chicago, Astronomy, Research Data Scientist 2020 - Present

- Work collaboratively with international teams from the US, Germany, and South Korea to analyze data and produce high-quality calibrated dataset.
- Created pipelines to simultaneously process massive astronomical datasets (Python). Determine signals / patterns in the large source catalog (N > 1million) by utilizing statistical methods. Reduced systematic errors up to 2% (from 10%) by improving flux measuring algorithms.
- Utilize SQL queries to extract data from databases and manipulate data for analysis. Continuously monitor and evaluate data quality and accuracy to ensure data integrity.

Leibniz-Institut für Astrophysik Potsdam (Germany), Researcher 2016 - 2020

- Performed in-depth research on complex computing issues; Conducted statistical analysis of large astronomical data sets to identify patterns and structures.
- Delivered presentations at five international conferences and collaborated on scientific publications.

Education

Ph.D. in Astronomy & Astrophysics, Seoul National University, South Korea 2016

B.S. in Aerospace Engineering, Inha University, South Korea 2009