In Sung Jang

Research Data Scientist at UChicago

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

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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

In Sung Jang

Physics Ph.D, Research Data Scientist at UChicago

hanlbomi@gmail.com · 312-709-6783 · Linkedin

Qualification Summary

Experienced research data scientist with over five years of expertise in quantitative research in astrophysics. 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***
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Professional Experience

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

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Linkedin, Schaumburg, 60194

Qualification Summary

Experienced research data scientist at the University of Chicago with expertise in data science and quantitative research. Proficient in programming languages, machine learning techniques, and data visualization. Adept at working in highly technical environments and collaborating with cross-functional teams. Seeking a challenging data scientist position to apply skills and resolve industrial and financial challenges.

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
  - Regression: predicted home prices using Zillow data using polynimical features
- ***Statistics***: Probability, Distributions, ML methods, Hypothesis testing
- ***Image processing***: Aligning, Stacking, Filtering astronomical images (IRAF, Pyfits)
- ***Relational Databases***: ERs, Table normalization; SQL joins, Table creation & row inspection
- ***Programming languages***: Python, SQL, R, Matlab, IDL; structures: classes, lists, trees; algorithms: sorts and list searches.
- ***Software***: MS office, equivalent Apple products and Tableau; Linux/Terminal environment
- ***Scientific Writing***: >10 first-author publications in Astrophysical journal with >300 citations

Professional Experience

University of Chicago, Astronomy, Data Science Research Fellow 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.
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- Performed in-depth research on complex computing issues; Conducted statistical analysis of large astronomical data sets to identify patterns and structures.
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Qualification Summary

Experienced research data analyst with a strong background in statistics and quantitative research. Proven track record of successful collaborations with international teams and publications in academic journals. Possessing ability to analyze large datasets, and draw meaningful conclusions from raw data. Broad insights in engineering, research, and data science make an asset in working collaboratively with cross-functional teams at Southern Company.

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 (2) Learn SQL Basics for Data Science Specialization (Univ. of Calibornia, Davis)
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- ***Relational Databases***: ERs, Table normalization; SQL joins, Table creation & row inspection
- ***Programming languages***: Python, SQL, R, Matlab, IDL; structures: classes, lists, trees; algorithms: sorts and list searches.
- ***Software***: MS office, equivalent Apple products and Tableau; Linux/Terminal environment
- ***Scientific Writing***: >10 first-author publications in Astrophysicsl journal (2015 - 2023)

Professional Experience

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

- Work collaboratively with international teams from the US, Germany, and South Korea to analyze data and produce high-quality calibrated dataset and publications.
- 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.

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- Performed in-depth research on complex computing issues; Conducted statistical analysis of large astronomical data sets to identify patterns and structures.
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Education

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Qualification Summary

Experienced research scientist with expertise in big image data analysis and quantitative research. Proven track record of international collaborations (US, Germany, and S. Korea) and rich publications in academia (>2000 citations). Proficient in programming languages, machine learning techniques, and data visualization. Seeking a challenging scientist position at Siemens to apply skills and derive breakthroughs in healthcare.

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)
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- ***Software***: MS office, equivalent Apple products and Tableau; Linux/Terminal environment
- ***Scientific Writing***: >10 first-author publications in Astrophysical journal (Google Scholar Profile)

Professional Experience

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

- Work collaboratively with international teams to analyze big astronomical image 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), Post-doctoral 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