Zhenhui Trinh

📞 1-302-559-5401   ✉ cathy.zhenhui@gmail.com   in linkedin/zhenhui-cathy-trinh   🔗 Website   🏠 Seattle, WA

SUMMARY

Results-driven data professional with 5+ years of experience managing data warehouse, developing ETL pipeline, and performing advanced data analysis. Proven experience in statistical testing, constructing and deploying machine learning models, and creating insightful dashboards to inform strategic decision-making. Strong communication and leadership skills, with demonstrated talent for effective project management and cross-functional collaboration.

SKILLS

Data Analysis: SQL, R, Python, PySpark, BigQuery	Data Visualization: Tableau, R Shiny, Power BI, Looker Studio
Other: Jira, Confluence, Trello, Smartsheet, Git/GitHub	DBMS: MS SQL Server, Azure Databricks, Snowflake, AWS RedShift, GCP

EXPERIENCE

Senior Healthcare Data Analyst (full time) | *SEIU 775 Benefits Group, Seattle, WA, USA*   November 2020 - Present

- Develop and monitor a COVID-19 surveillance dashboard in Tableau, tracking infection, hospitalization, and vaccination, providing regular updates and recommendations for organizational pandemic response strategies.
- Develop and maintain ETL pipelines in Azure Databricks, leading to at least 30% increase in data acquisition efficiency.
- Drive value-based purchasing strategy to improve population health by defining measurable goals, metrics, and performance guarantees that leads to 15% reduction in avoidable ED and hospital utilization and 20% improvement in chronic condition management.
- Construct complex SQL scripts to extract data from the data warehouse for deep dive analyses in R or Python, key projects:
  - Evaluate ROI of key contracts, resulting in the realization of $2.5M cost-saving and the optimization of benefits structures.
  - Contribute to successful acquisition of $34M in monthly state funding to expand healthcare coverage for 25,000 home care aides.
  - Proactively perform gap analysis to pinpoint healthcare disparity and collaborate with cross-functional teams to launch targeted campaigns that have successfully improved preventive dental and cancer screening in underserved communities by at least 25%.
- Enhance the organization's analytical capabilities by designing and delivering a comprehensive training program that equipped three cohorts of 20+ researchers and program managers with essential data analytic programming skills.
- Produce and deliver quarterly key performance indicators reports to senior leadership and the Board of Trustees, and demonstrate thought leadership and expertise by delivering engaging presentations at industry conferences.

Lead Business Intelligence Analyst (full time) | *SEIU 775 Benefits Group, Seattle, WA, USA*   June 2019 - November 2020

- Led a team of data analysts and data engineers in the design, development, and testing of a dimensional data model in Snowflake during end-to-end BI development lifecycle, resulting in 80% improved reporting efficiency and accuracy.
- Led cross-functional teams in Agile product development using Jira. Managed requirements, facilitated communication, and provided critical data insights to inform strategic decisions and meet project milestones.
- Developed comprehensive 60-page data mart specification guides on Confluence, featuring ERD, data dictionary, and process flowcharts, leading to a 50% reduction in new employee onboarding time.
- Conducted root cause analyses for system defects, saving stakeholders a combined 100+ manual hours a month.
- Analyzed survey data through text mining and sentiment analysis, driving a remarkable 90% increase in satisfaction.
- Augmented team productivity by 95% by automating repetitive tasks with 150+ R, Python, Shell scripts, and SQL procedures. Enhanced team collaboration by providing Git/GitHub training and generating best practice documents.

Actuarial Data Science Intern (full time) | *Milliman, Seattle, WA, USA*   May 2018 - June 2019

- Developed ETL pipelines to pre-process and clean data for modeling in 2 large consulting projects on lapse and mortality.
- Performed trend analysis with life insurance data, tuned and deployed machine learning models (e.g. logistic regression, decision tree, random forest, XGBoost) that allows clients to make decisions around capital reserve with high confidence.
- Boosted user engagement and maintained 100% user retention through the implementation of interactive data visualizations in R Shiny applications. Combing R codes with HTML/CSS to bring life to static graphs.
- Partnered with data scientists and actuaries to co-author 2 industry reports and 1 newsletter article within 3 months.

EDUCATION

Master of Science in Bioinformatics *Northeastern University, Boston, MA, USA*   May 2019
Bachelor of Science in Health Sciences *Drexel University, Philadelphia, PA, USA*   May 2016