

ALIER RENG

Data science professional, statistician, and educator with over 5-year experience in healthcare analytics and more than seven years of university teaching experience. Passionate and results-oriented data scientist with a proven record of project completion with efficiency and speed. Areas of interest include data science, statistics, and deep learning.

INDUSTRY EXPERIENCE

present
|
2021

● Sr. Data Analyst

LifePoint Health

📍 Brentwood, TN

- Data Stewardship: perform monthly data validation to ensure data accuracy before being pushed to PowerBI for hospitals' use.
- Support and assist hospitals and the HSC departments with their data needs.
- Perform exploratory and predictive analysis with R and Python.
- Create and modify divisions and hospitals' NHSN Goals, MOR, and QOC reports and dashboards using R and PowerBI.
- Onboard and train new team members.

2021
|
2016

● Data Analyst

LifePoint Health

📍 Brentwood, TN

- Cut QOC and MOR decks production time by 80% by automating reports with R Shiny.
- Reduced data errors and optimized accuracy by automating CHOIS monthly mortality reports with R Shiny.
- Used R to automate the CMS company-wide VBP, HAC Penalty, and MSPB reports extraction processes.

TEACHING EXPERIENCE

2016
|
2011

● Lecturer

Middle Tennessee State University

📍 Murfreesboro, TN

- Taught general math courses including plane trigonometry, applied calculus I, applied statistics/introductory statistics, finite mathematics, college algebra, mathematics for general studies (Mathematical Ideas), and Pre-Calculus (Pathways to Calculus).
- Turned 'F' students into 'A' and 'B' students through active and participatory learning; used hands-on approaches to make students conceptualize mathematical concepts to be able to construct meaningful mathematical statements.
- Helped challenged students to change their negative thinking into positive-possibility thinking through friendly coaching and mentorship.

2011
|
2009

● Graduate Teaching Assistant

Middle Tennessee State University

📍 Murfreesboro, TN

- Taught Applied Statistics and tutored both math and statistics.

CONTACT

✉ tongakuot@icloud.com
🌐 cushanalytics.com
🐙 github.com/tongakuot
🐦 twitter.com/tongakuot
in [linkedin.com/in/tongakuot/](https://www.linkedin.com/in/tongakuot/)

SKILLS

💻 **Programming:** R, Python, PySpark, SQL, HTML, CSS

🛠️ **Tools:** RStudio, Jupiter Notebook, R Shiny, PowerBI, Microsoft (Word, Excel, PowerPoint), Visual Studio Code, Cognos

➤ **Framework:** R Shiny, Django, WordPress

📦 **R & Python Packages:** Tidyverse, tidyquant, lubridate, ggplot2, Shiny, ggrepel, pagedown, xaringan, stationery, papaja, RMarkdown, gt, knitr, skimr, tidymodels, tinytex, pandas, numpy, matplotlib, seaborn, scikit-learn, sympy, BeautifulSoup, Spacy

🔗 **Version Control:** Github

💡 **Other:** Data science, statistics, mathematics, teaching, data visualization with R Shiny, time series, machine learning (ML), deep learning (DL), natural language processing (NLP)

Made with the R package
[pagedown](https://github.com/tongakuot/ar_cv).

The source code is available at
github.com/tongakuot/ar_cv.

Last updated on 2022-07-06.



RESEARCH EXPERIENCE

2007
|
2006



Undergraduate Research

University of Texas at Dallas

📍 Richardson, TX

- Conducted LSAMP supported undergraduate research under Dr. Mohammed Abdelsalam at the University at Dallas and presented it at the University of Texas at El Paso.
- Traced the Aswa Shear Zone using the Advanced Spaceborne Thermal Reflection and Radiometer (ASTER) Data and presented the findings during the LSAMP competition at the University of Texas at El Paso in 2007.



EDUCATION

2017
|
2016



MBA., Information Systems Management

LeTourneau University

📍 Longview, TX

2011
|
2009



M.S., Professional Science - Biostatistics

Middle Tennessee State University

📍 Murfreesboro, TN

2008
|
2005



B.S., Neuroscience

University of Texas at Dallas

📍 Richardson, TX

2005
|
2003



General Studies (Mathematics/PreMed/PrePharmacy)

Richland College (DCCCD)

📍 Dallas, TX



LEADERSHIP AND COMMUNITY ENGAGEMENT

Present
|
2020



President

Jonglei Institute of Technology

📍 Murfreesboro, TN

- Run the day-to-day activities of the organization.
- Plan and implement programs to advance the company's mission & vision.
- Write and maintain the company's legal documents, build and maintain the website.
- Teach data science courses with Python and R.

ONLINE COURSES

Business Science: DS4B 202A-R: Shiny Developer with AWS; DS4B 101-R: Business Analysis With R; DS4B 201-R: Data Science For Business With R

Datacamp: Machine Learning Scientist with R; Data Scientist with R; Data Scientist with Python; Winning a Kaggle Competition in Python

Udemy: PySpark Essentials for Data Scientists (Big Data + Python); Web Scraping and API Fundamentals in Python 2021; Interactive Python Dashboards with Plotly and Dash; Master in Microsoft Power BI Desktop and Service NLP - Natural Language Processing with Python

AWARDS & HONORS

LifePoint Health
Mercy Award (2020)

The University of Texas at Dallas
Louis Stokes Alliance for Minority Participation (LSAMP) Scholarship (2006 - 2007)

Richland College (DCCCD)
Vice President's List (2005)



POSTERS AND PRESENTATIONS

2007



Tracing the Aswa Shear Zone using the Advanced Spaceborne Thermal Reflection and Radiometer (ASTER) Data

Poster & Oral Presentation, Undergraduate Research in Geology



University of Texas at El Paso

- Traced the Aswa Shear Zone using the Advanced Spaceborne Thermal Reflection and Radiometer (ASTER) Data and presented the findings during the LSAMP competition at the University of Texas at El Paso in 2007.