

ALIER RENG

A seasoned data scientist and dedicated educator with over seven years of healthcare analytics experience and over five years of university teaching experience. A results-oriented professional known for efficiently delivering successful projects. Areas of expertise encompass data science, statistics, and deep learning. Passionate about leveraging these skills to drive innovation and make a positive impact.

INDUSTRY EXPERIENCE

present
|
2022

- Sr. Director**
ScionHealth 📍 Louisville, KY
 - Data Stewardship: Oversee new report development and conduct initial and monthly data validations to ensure data accuracy.
 - Collaborate with the subject matter experts and Clinical Operations Leaders to develop National Quality Program (NQP) measures.
 - Automate routine tasks with R and create a monthly operations report dashboard using R Shiny.
 - Create Quality Measures Specifications document and provide report instructions for hospital leaders.
 - Manage and prepare monthly GMLOS Variance Report for Clinical Operations and Care Management leaders.

2022
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2021

- Sr. Data Analyst**
Lifepoint Health 📍 Brentwood, TN
 - Data Stewardship: performed monthly data validation to ensure data accuracy before being pushed to PowerBI for hospitals' use.
 - Supported and assisted hospitals and the HSC departments with their data needs.
 - Performed exploratory and predictive analysis with R and Python.
 - Created and modified divisions and hospitals' NHSN Goals, MOR, and QOC reports and dashboards using R and PowerBI.
 - Onboarded and trained 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.

CONTACT

✉ tongakuot@icloud.com
🔗 [Projects](#)
🌐 alierwai.org
📄 github.com/tongakuot
📺 [@AlierwaiDataStudio](https://www.youtube.com/@AlierwaiDataStudio)
📌 [linkedin.com/in/tongakuot/](https://www.linkedin.com/in/tongakuot/)

SKILLS

📄 **Programming:** R, Python, SQL

🛠️ **Tools:** RStudio, VS Code, Quarto, Jupiter Notebook, JupyterLab, R Shiny, PowerBI, Microsoft (Word, Excel, PowerPoint)

➤ **Framework:** R Shiny, Quarto

📦 **R & Python Packages:** Tidyverse, Quarto, Shiny, pagedown, papaja, RMarkdown, Plotly R, gt, geExtras, tidymodels, pandas, numpy, matplotlib, seaborn, scikit-learn, sympy, Polars, BeautifulSoup, PyTorch

🔗 **Version Control:** Github

💡 **Other:** Data science, statistics, mathematics, teaching, data visualization with R Shiny, time series, deep learning (DL)

Made with the R package [pagedown](#).

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

Last updated on 2023-11-03.



TEACHING EXPERIENCE

2016
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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.



EDUCATION

2017
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2016



MBA., Information Systems Management

LeTourneau University

📍 Longview, TX

2011
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2009



M.S., Professional Science - Biostatistics

Middle Tennessee State University

📍 Murfreesboro, TN

2008
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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
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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.
- Provide free tutoring and mentorship to individuals from South Sudan and Kenya.
- Publish YouTube tutorial videos on Alierwai DataStudio and Jonglei Institute of Technology.

I am passionate about data science and statistics education with R and Python. I understand that numerous people worldwide, especially in my home country of South Sudan, want to learn but have limited resources.

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)