# QIUSHI YAN

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#### Website $\diamond$ Github $\diamond$ Linkedin

#### **EDUCATION**

Vanderbilt University - Data Science Institute

Master of Science in Data Science

Nashville, TN Expected May 2023

Communication University of China Bachelor of Arts in Data Journalism Beijing, China September 2017 - June 2021

#### **EXPERIENCE**

## LearLab - Fullstack Engineer

October 2022 - Now

- Lead the development of ITELL, a framework for building intelligent digital textbooks using Next.js, TypeScript, Prisma, and Tailwind. Build apps in a monorepo with separate packages in UI, database, domain features, etc.
- Connect custom large language models to the frontend and deploy via Google Cloud.

#### RStudio - Software Engineer Intern

May 2022 - August 2022

- Developed the R package agua for integrating the H2O.ai machine learning platform with tidymodels.
- Contributed bug fixes and features to other modelling packages in tidymodels: parsnip, tune, usemodels, bundle.

Mobile Health Lab at Vanderbilt University - Software Engineer

Jan 2022 - April 2022

• Improved APIs for data ingestion and managed AWS infrastructure: RDS, Lambda, API Gateway and ECS.

#### FULLSTACK PROJECTS

tridata - Online code editor that runs Python + R + SQL in the browser

React, WebAssembly

• Developed an interactive code editor which supports Python + R + SQL natively in the broswer. Computations are backed by WebAssembly. Language kernels can be extended through web workers.

anime - A recommendation system for anime series

Angular, PyTorch, Kafka

• A recommendation system for anime streaming website, including Airflow ETL tasks with PySpark, training pipelines with Graph models with Neo4j, microservice GraphQL APIs with FastAPI.

xetra - An ETL pipeline and API service for trading data

SQL, pandas, Pytest

• Developed ETL pipelines to process the daily trading data of Deutsche Börse Group and save clean data to AWS S3. Fully tested with Pytest, deployed via AWS step functions.

## SOFTWARE PROJECTS

nyclodging - A machine learning Shiny app for exploring Airbnb listings

NLP, FastAPI, GraphQL

• Developed the frontend and APIs for a language model that predicts prices for Airbnb listings. Revamped the legacy backend with GraphQL endpoints and E2E tests.

pylubridate - A Python library of datetime utilities

Python, Rust

• A Python library for working with datetime data with a Rust backend. Implemented parsing of ISO strings into date objects, common year, month, day extractors, and date arithmetics.

For more projects see projects.qiushiyan.dev.

## ADDITIONAL

Languages TypeScript, Python, Rust, Go, Elixir, SQL

Frameworks React, Angular, Vue, Nest.js, FastAPI, Cypress, GraphQL, Django

Certification AWS Certified Developer