Alan Wang

alanwangmd@gmail.com **|** (240) 893-5389

EXPERIENCE

Capital One Financial   **August 2022 – Present**
Software Engineer, DevOps | Marketing and Data   *New York City, New York*

- Managed internal Apache Airflow platform hosted on AWS Cloud used by 17+ teams to orchestrate ETL pipelines, including maintaining the platform,, assisting teams during office hours, and developing DAGs to improve data pipeline efficiency
- Built out access management and authorization for the Airflow API for tenants to enable usage of the API and enforce multi-tenancy so teams do not interact with resources outside of their permissions
- Created and tested dataset trigger for S3 event notifications to parse messages from SQS so teams could schedule DAG triggers using Airflow Datasets
- Built and distributed Github App to streamline validation of teams' Airflow connections and variables, also included IDE-level validation for teams to create Airflow connections efficiently

Software Engineer | Card Core   *New York City, New York*

- Owned and led database migration from Cassandra to DynamoDB for the transactions ETL pipelines, implemented retry solutioning for pipelines to reduce batches by 1% (~300,000 transactions) per batch.
  - Monitored Splunk and collectively resolved issues with clients that were encountered during data seedings attempts
- Added required functionality for clients to use our transactions API to reduce tech debt from 10+ legacy services
- Deployed and distributed a script on AWS lambda to automatically pull vulnerabilities weekly and push them as slack notifications to 5+ teams to improve quality of life
- Resolved issues regarding performance for APIs through testing with Jmeter, ultimately increasing performance for APIs by 630%

Cvent   **June 2021 – August 2021**
Software Engineer Intern   *Tysons Corner, Virginia*

- Reduced size of matched facts in half, leading to a decrease in server load by the facts being posted (During Cvent CONNECT 2021: ~141,470 matched facts, space used went from ~270 MB to ~140 MB)
- Optimized queries made for tracking player's goal progress, time complexity from linear to constant (During Cvent CONNECT 2021: time for player goal progress query went from 536 seconds to 21 seconds)
- Transitioned leaderboard services from back-end processing to a new leaderboard database, reducing processing time for all associated statistics, revised and created relevant Postman tests for new queries

PROJECTS

Analyzation of Valorant Agent and Map Pick and Win Rates

- Scraped Blitz and compiled into a collection of datasets, processing and training a model to predict win-rate of a team based off of different combinations of statistics such as team composition, map, and average combat score
- Utilized pandas, numpy, sci-kit-learn, and seaborn libraries for data processing and visualization

Workout Pal Project

- Developed a web-app that allows users to sign-in to create and view workouts, centralizing fitness routines into one site
- Used React.js and Google Firebase to build web-app, modified code to make it visually appealing with different mobile screen sizes based on user feedback

EDUCATION

University of Maryland, College Park   **May 2022**
Bachelor of Science in Computer Science, Minor in Statistics   *College Park, MD*

CERTIFICATES AND SKILLS

AWS Certified Solutions Architect - Associate (SAA)
Programming Languages and Web Technologies: Java, Python, Go, JavaScript, React.js, HTML, CSS
Databases: PostgreSQL
Other: Amazon Web Services, Docker, Jenkins, Git, Apache Airflow, Terraform, Jupyter, Spark