

Alan Wang

alanwang2020@gmail.com | linkedin.com/in/alanwang2020 | github.com/alanwang20 | (678) 508-9258 | U.S. Citizen

EDUCATION

Georgia Institute of Technology

M.S. Analytics (Computational Data Analytics)

Aug 2024 – Dec 2025

GPA: 4.00/4.00

University of Georgia

B.B.A. Management Information Systems (Data Analytics)

Aug 2020 – May 2024

GPA: 3.99/4.00

RELEVANT EXPERIENCE

CIGNA GROUP

Incoming Analytics Leadership Development (ALDP) Intern

May 2025 – Aug 2025

CENTENE CORPORATION

Data Engineering Intern, Call Center Engineering

May 2024 – Aug 2024

- Led 4 end-to-end exploratory initiatives, including bot centrality analysis, agent staffing, authentication failure, and a pre-emptive caller dropout model. Leveraged Python and SQL to extract data from Snowflake, engineer 10+ KPIs, cluster 50+ bots, and develop visualizations, collaborating with business and engineering teams to ensure business-oriented and data-backed insights.
- Discovered 10 bot processes impacting authentication rates for over 750,000 yearly callers and 3 daily discrepancies between agent staffing and call volume. Presented findings to 150+ stakeholders through business reports and technical documentation, outlining key focus areas to optimize call center operations.

Data Engineering/Technical Product Owner Intern, Product Support Analytics

May 2023 – Aug 2023

- Collaborated with key stakeholders from Centene's Recovery Platform (CRP) to identify 7 operational KPIs and deploy a live Power BI dashboard to production, allowing recovery teams to begin tracking claims recovery analytics over time.
- Orchestrated analytics engineering pipeline, configuring and deploying 50+ Snowflake objects (Streams, Tasks, Tables, Views) from Confluent Cloud across Git environments, optimizing semi-hourly extraction and transformation of unstructured data for loading into Power BI.

Technical Product Owner/Manager Intern

May 2022 – Dec 2022

- Automated new-hire entitlement granting processes using Python (Selenium), reducing processing time per entitlement by over 55% and onboarding time from 2 months to under 30 minutes, with projected cost savings of up to \$170 million annually.
- Conducted surveys (Qualtrics) and interviews with hiring managers to uncover 3 key bottlenecks in the new-hire onboarding process. Researched access-control systems and presented findings to business and technical teams, driving efforts to reduce onboarding time.

PROJECTS

SDoH Analysis for Health Desert Identification and ER Visit Prediction

In-progress

- Engineering a county-level Georgia dataset with 200+ Social Determinants of Health (SDoH) features including ER, public health, and demographic data; applying PCA and LASSO to isolate 15 key predictors of preventable ER visits.
- Clustering counties by SDoH profiles to define health desert severity levels, and training supervised models (SVM, Random Forest) to predict preventable ER visits tied to SDOH feature representation across clusters.

State-Level Electricity Forecasting and Visualization Tool

Dec 2024

- Created Python scripts to extract, transform, and load 2.5M+ records (JSON, GeoJSON) from the Energy Information Administration (EIA) API into a GCP MySQL database, engineering a data pipeline to support machine learning model development and interactive visualizations.
- Developed predictive models using LSTM Neural Networks and XGBoost to forecast electricity demand and generation trends for each Balancing Authority, complemented by PageRank to analyze systemic vulnerabilities in the grid. Created interactive visualizations in Tableau and Power BI to enable stakeholders to explore forecasted trends, identify grid risks, and make data-driven decisions.

Human-Mays Case Competition (50th out of 284 Teams)

Sep 2024

- Developed CatBoost model in Python using dataset of over 1.9 million members, achieving an adjusted AUC score of 0.75 to predict Medicare Advantage LPPO members likely to engage in preventative care visits.
- Extracted top 20 features to provide targeted recommendations in addressing member unengagement by leveraging Humana's existing architecture—increasing member health outcomes, Medicare Advantage plan ratings, and risk-adjustment payouts.

LEADERSHIP & ACADEMIC INVOLVEMENT

Lambda Phi Epsilon Fraternity, Inc.

Aug 2021 – Present

- Mid-Atlantic Region Governor (Present), Alumni Advisor (Present), Chapter President, V.P. Communications, Sergeant-at-Arms, MGC Delegate

Undergraduate Teaching Assistant

May 2022 – May 2024

- Introduction to Econometrics (ECON 6/4750), Data Science for Economics/Business (BUSN 5000), Introduction to Info. Systems (MIST 2090)

Undergraduate Research Assistant

Aug 2020 – Jan 2024

- Theory Research Exchange (T-Rex) Lab: Information Systems, Center for Undergraduate Research Opportunities: Mechanical Engineering

Order of Omega Honor Society

May 2022 – Jan 2024

- Director of Recruitment and Programming

SKILLS

Languages: Python (Pandas, NumPy, scikit-learn), SQL (MySQL, SQLite, Postgres), R (Tidyverse, XGBoost, RandomForrest), Java, HTML/CSS

Data Processing: Snowflake, Apache Spark, Docker, Kubernetes, Web Scraping, Web APIs

Visualization: Power BI, Tableau, D3.js, Matplotlib, ggplot2, UML, BPMN 2.0, Gephi

Development and Deployment: AWS, GCP, Azure, Git, Salesforce, Agile/Jira

Certifications: AWS Certified Cloud Practitioner, Lean Six Sigma Yellow Belt, Snowflake Hands-on Data Essentials