Thomas Bolf

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EDUCATION

The University of Texas at Austin

Austin, TX

M.S. in Data Science (Enrolled)

In progress

Texas A&M University

College Station, TX

B.S. in Computer Science and Applied Mathematics (Double Major), Statistics Minor

May 2025

- GPA: 3.906/4.000 (Summa Cum Laude)
- Mathematics Departmental Honors

EXPERIENCE

Software Engineer

July 2025 - Present

J.P. Morgan Chase & Co.

Austin, TX

- Developed and optimized RESTful APIs to enable secure, scalable cross-organizational communication, improving efficiency and time-to-market for enterprise embedded finance platforms
- Implemented OpenTelemetry for distributed tracing and observability, enhancing system performance monitoring and reducing mean time to resolution (MTTR)
- Utilized Spring Boot and Thymeleaf to generate dynamic PDF reports containing financial information for large enterprise clients

Software Engineer Intern

Summer 2024

J.P. Morgan Chase & Co.

Austin, TX

- Designed and implemented a distributed AWS-based data pipeline (EC2, EKS, MSK) serving cross-organizational needs through Terraform-driven infrastructure-as-code practices
- Created a plugin for Kong API Gateway to access data for system monitoring and performance analysis using Lua and Go
- Developed a proof-of-concept for interactive analytics dashboards (React/Highcharts) for API performance on a client-facing developer portal

Software Engineer Intern

Summer 2023

J.P. Morgan Chase & Co.

Plano, TX

- Migrated data pipeline for government-mandated reports to cloud environments using Java Spark
- \bullet Rigorously implemented test-driven development (TDD) practices, achieving 95% code coverage through JUnit tests for critical financial data processing components
- Collaborated with QA team to develop automated testing pipelines using Jenkins

Projects

Texas A&M Club Golf App | Swift, iOS

Spring 2025

- Created an iOS app to digitalize score-keeping and team organization for golf players and teams
- Used results from recent studies in Human-Computer interaction to create a user friendly, novel and accessible app for golfers

LLM-Powered Data Visualization Tool | Python, Flask, OpenAI API, D3.js

Fall 2024

- Developed a Flask-based web application to generate AI-assisted data visualizations based on user-defined goals, audiences, and visual styles
- Integrated OpenAI's ChatGPT API to dynamically generate and execute Python code for automatic chart rendering

Electrocardiogram Data Analysis | Python, R, Tidyverse

Spring 2023

- Developed a full-scale ETL pipeline for large time series data generated by medical technologies
- Performed cross-recurrence quantification analysis on heart activity time series to derive clinical insights

Technical Skills

Languages: Swift, Python, SQL, Java, JavaScript/TypeScript, Go, C/C++, R, HTML/CSS

Technologies: AWS (EC2, ECS, EKS, S3, Lambda, MSK), Linux, Docker, Git, Flask, Next.js, React, Spark, Spring