MEREDITH HELLER

mheller5@nd.edu | 309.533.4163 | Git: /meredithheller | LinkedIn: /meredith-heller

EDUCATION

University of Notre Dame | Notre Dame, IN Expected Graduation: May 2024
B.S. Computer Science, Minor in Sustainability Cumulative GPA: 3.962

Related Coursework: Data Structures, Operating Systems, Algorithms, Databases, Computer Architecture, Linear Algebra

SKILLS & TECHNOLOGIES

Languages: Python, Go, Java, C, SQL, TypeScript, JavaScript, Swift
Technologies: AWS Lambda, ECS, Step Function, S3, DynamoDB, CloudFormation, CloudWatch, PostgreSQL, ReactJS & Native, Git, MySQL, XCode, Firebase, Flask, React Testing Library, Node.js

EXPERIENCE

Twitch | Backend Software Engineer Intern June -August 2023

- Designed the system architecture for a monthly wallet credit system targeting 3.5-6.5MM lapsed spenders for a projected $2-3.6MM in additional yearly revenue, implementing the design with Infrastructure as Code via CloudFormation
- Developed an ECS task using Go to poll S3 daily for campaign files, validate eligible user requirements, and invoke a Step Function for up to 1M users concurrently
- Orchestrated the campaign flow for each user's Step Function through Lambdas and wait and fail states that add and track credits and notify users via external and internal APIs and DynamoDB, vigilant of spend to prevent overallocation
- Designed DynamoDB tables and atomic, idempotent queries to effectively moderate campaign progress by making use of atomic counters, global secondary indexes, transactions, and conditional updates
- Implemented a currency conversion rate gRPC API that balanced the system's heavy traffic spikes with server and client-side caching

ND HCI Lab | Full Stack Developer & Research Assistant January 2022- Present

- Led a team of three front-end engineers through the development of two UI designs to allow researchers to uncover which design choices best suited food desert-bound users using React Native, Firebase, and Python
- Engineered a Rest API to enable grocery recommendations from amongst ~100K location-dependent products using external APIs and lab optimization algorithms
- Increased UX simplicity and repository readability for co-developers, increasing developer productivity by 20% by restructuring the original codebase's React Navigation

WHOOP | Frontend Software Engineer Intern June - August 2022

- Spearheaded frontend effort on membership services web application redesign that decreased time/ticket by 25% by building the new site's main page and working with users and designers to best understand product needs
- Utilized ReactJS, TypeScript, Node.js, and React Testing Library to dynamically display customer insights in custom, reusable components including tiles, graphs, and charts
- Introduced form safety to an internal tool microsite, enabling engineers to effortlessly create team-specific tools

State Farm Insurance Company | Full Stack Software Engineer May - July 2021

- Alleviated restriction and auditing pains for over 6,000 Enterprise Technology employees by developing a Gitlab self-service web application using a MERN stack
- Built a Rest API that communicated with Gitlab to automate and redirect many of the team's most common requests

PROJECTS

Podcast Road Trip SQL Mobile App

- Built a mobile app which optimally aligned road trip stops with desirable podcasts using MySQL, React Native, and a Python-based backend
- Architected an optimal database schema to handle user authentication, organize Spotify podcasts and metadata with Google Maps API, and create a social network
- Optimized SQL queries on over 100,000 items within a Flask framework to serve on-demand user requests

Birthday Tracking iOS App

- Developed a birthday tracking app with SwiftUI to build out navigation, theming, notifications, and implement effective Swift state handling via XCode