LOGAN SHERWIN

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PROFESSIONAL EXPERIENCE

Amazon Sep. 2023 – Present

Software Development Engineer II (Apr. 2025 – Present) Seattle, WA
Software Development Engineer (Sep. 2023 – Apr. 2025)

- Designed and automated **SageMaker** model deployment using **Docker** and **SageMaker Pipelines**, integrating with the dataset generation workflow to cut refresh time from 1 week to 3 hours and extend support to 9 marketplaces
- Automated a 1.5-day manual auditing process, reducing it to a 2-hour solution using **Python** on a **Docker image** running on **AWS Fargate** and **Step Functions**, eliminating manual errors and improving scalability
- Supported business teams in building dashboards to track product recommendation irrelevance across all retail marketplaces, reducing search query analysis time from 3 hours to 5 minutes and enabling faster issue resolution
- Re-architected a dataset generation pipeline covering over 2B product mappings, improving job efficiency by 44% with jobs written in **Scala** and **SQL** and executed using **AWS Elastic MapReduce**, **SageMaker**, and **Lambda**
- Migrated a dataset generation pipeline covering 180M+ products from a regional execution model to a per-marketplace execution, reducing region runtimes by 80% and enabling clearer root-cause analysis
- Implemented granular monitoring for dataset generation pipelines, increasing the number of **AWS CloudWatch** alarms by 72% and managing them via infrastructure-as-code using **AWS CDK**, improving failure detection and response time

Amazon Jun. 2022 – Sep. 2022

Software Development Engineer Intern Seattle, WA

- Developed a new core operator for an internal service handling 20M+ requests per second, enabling customers to access their **AWS SageMaker** inference endpoints for machine learning predictions
- Built and executed non-blocking I/O requests in **Java**, enabling seamless integration with SageMaker endpoints
- Transformed response data into the platform's query language in under 20ms, improving query efficiency
- Integrated SageMaker models into customer business logic, enabling low-latency inference

SESCO Enterprises, LLC Jun. 2021 – Sep. 2021

Quantitative Developer Intern Pittsburgh, PA

- Developed a high-performance simulation engine in **Python** with **Nim** extensions to efficiently estimate fair values of Financial Transmission Rights, a critical auction-based market for optimizing wholesale electricity trading strategies
- Implemented backtesting to validate model predictions, cutting analysis time from 2 days to 3 minutes

PERSONAL PROJECTS

Adrenaline Recruiting Feb. 2023 – Aug. 2024

- Developed an iOS app using **Swift** and a web app using **React** and **TypeScript**, providing users with access to 100,000+ past dive meets and algorithm-based tools for creating optimal competition lists and real-time results
- Built a cloud-based platform using **AWS Amplify**, **DynamoDB**, and **AppSync** for seamless data access, integrated **AWS Lambda** and **Pinpoint** for real-time messaging, and utilized **Rekognition** for identity verification

Path Tracing Rendering Engine May 2023

- Developed a **C++** path-tracing engine to simulate realistic light behavior in illuminated scenes
- Accelerated matrix operations using the system's **GPU**, improving rendering speed by 93% and making real-time path tracing more feasible

EDUCATION

University of Chicago Sep. 2019 – Jun. 2023

Joint B.S./M.S. in Computer Science, Machine Learning Specialization Chicago, IL
GPA: 3.82/4.00
Dean's List (2021-22)

RELEVANT COURSEWORK

- Advanced C++
- Computer Vision
- Computer Architecture
- Databases
- Human-Computer Interaction
- Ethics & Privacy
- Computer Security
- Networks