

Kara Dietz

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SKILLS

Languages: C/C++, Python, Java, Ruby, Kotlin, Go, SQL, Bash, Objective-C, Swift

Tools & Frameworks: Docker, Kubernetes, GraphQL, Kafka, Rails, Flask, AWS, GCP, Maven, Git

WORK EXPERIENCE

Faire | Backend Engineer Intern

Sept. – Dec. 2022

- Re-engineering infra with anti-abuse support, preventing malicious attacks and increasing reliability

Meta | Software Engineer Intern

May – Aug. 2022

- Built invite links for [end-to-end encrypted group chats](#) used in Messenger, Instagram, Oculus, etc., including C infra and iOS UI for 200K+ daily active users, pushing the transition to encrypted messaging
- Architected a privacy-centric metrics aggregation system to expose the UX impact of decryption errors by tracking the error recovery flow and logging latency and frequency results for immediate analysis
- Streamlined tedious decryption error simulations, expediting development and testing for 30+ engineers

Shopify | Backend Developer Intern

May – Aug. 2021

- Integrated [theme app extensions](#) into Shopify's online store editor used by 2 million+ merchants
- Designed caching system for app blocks, decreasing average load time from 40ms to 3ms
- Automated complete dev environment setup used by team of developers, saving ~20 minutes/day
- Built robust tooling for app extension developers to verify version compatibility prior to manual testing

Shopify | Production Engineer Intern

Sept. – Dec. 2020

- Spearheaded auto-scaling of Kafka topics supporting 1,000,000+ messages/second, saving 3+ hours/week for production engineers and optimizing resource usage by >200%
- Designed Python package to monitor Kafka streams using Datadog and Github APIs, and deployed with Docker and Kubernetes, building the foundation for automated infra maintenance

Capital One | Software Engineer Intern

Jan. – Apr. 2020

- Created AWS Lambda, Kafka, and AWS Kinesis serverless pipelines to detect patterns and notify customers in real-time of potential fraudulent activity, achieving >95% customer satisfaction rating
- Added integration tests to deployment lifecycle, eliminating 5 day approvals by exceeding quality bars

OpenText | Software Developer Intern

May – Aug. 2019

- Designed web debugging tool to categorize and display test failure results, saving an ~4 hours/week
- Automated 100+ UI tests, ensuring precision and decreasing runtime by >5x

PROJECTS

Daily Chess Pro | Messenger bot sending subscribed users daily chess puzzles

Hack the North

- Leveraged GCP's App Engine to host Flask API handling webhooks, and CronJobs for scheduled jobs

Ballerinify | iOS app using machine learning to identify the user's dance moves in real-time

- Employed the Tensorflow Posenet machine learning model to map key points on the user's body

EDUCATION

Sept. 2018 – Apr. 2023

University of Waterloo | Bachelor of Software Engineering

GPA: 3.8/4.0 | Coursework: Data Structures, Algorithms, Concurrency, Databases, Operating Systems