

ZESHAN ANWAR

Senior Software Engineer - *Apple*

Professional

Software Engineer Apple

May '19 - Current

(Python, Kafka, Kubernetes)

- Process **petabytes** of data daily with in-house processing infrastructure pipelines
- Trace **millions** of computations with very low-latency
- Work integral to release of new **Apple Silicon** (M1 chip and more)

Software Engineer Bazaarvoice

May '17 - May '19

(Kafka, Elasticsearch, Hadoop, Scala, Java, Ruby, AWS, Jenkins, Kubernetes, Datadog, Kibana)

- Built a revolutionary **real-time** denormalization engine in **Kafka**; running **thousand's** of computations with very low latency on a distributed in-house managed Kafka cluster
- Designed a **KStreams** API framework to house and deploy our computations
- Supported flagship API that serves **~2 billions** API calls a month for 5000+ clients (Walmart, Target, Sears)
- **Rebuilt** API platform for Target and Sears to improve query performance. **10x** reduction in average response latency (~1s -> ~100ms). Saved the company **thousands** in AWS hosting costs
- **Kafka OSS contributor** - provide feedback to Confluent on their toolkit around Kafka (KSQL, Schema Registry, Rest Proxy)

Full-Stack Developer Client Outlook

Jan '17 - Apr '17 (Part-time)

Jan '15 - Apr '15 (Internship)

(React, Flux, Node.js, Java, Javascript)

- Developed freehand annotation tool for viewer. Optimized with the **Douglas-Peucker algorithm**. Worked directly with clients in China to meet specs.
- Designed the responsive face of viewer utilized by **thousands** of clinicians and doctors, everyday across the world.

Projects

KafkaREST

Scalatra - REST API
2019

- Consolidating useful Kafka CLI tools behind a simple REST interface
- Simple GET / POST calls to manage and track a Kafka cluster
- Notable Features:
 1. Tracking partition **offsets** (Consumer and Producer)
 2. **Tailing** a topic (Kafkacat)
 3. Listing consumers of a topic, **resetting** consumer offsets
 4. **Rolling-reboot** of brokers
- Releasing as an Open Source project

Linkme.care

Architect & Consultant
<https://linkme.care>
2019

- Engineered prototype (Express API with MongoDB) for startup pitch and **successfully** raised money. Connected with 3000 doctors across Canada.
- Implemented **novel** matching algorithm
- Collaborated closely with founders and lawyers to establish **data privacy** practices. Architected an encrypted silo-based solution for PII

Art in AR

iOS - Swift
2018

- Devised an **innovative** algorithm to anchor image to a vertical plane, **without** the use of a depth camera

SKILLS

Python, Scala, Java, Ruby, Javascript, C++, Swift

Kafka, Elasticsearch, Hadoop, React, Node.js, Docker, Dropwizard, OpenCV

Jenkins, Datadog, Kibana, AWS

Division 1 Basketball Player

INTERESTS

Building fast streaming platforms

Engineering performant APIs

Microservices

Machine Learning and AI (Neural Networks)

Search / Big Data

Graph Databases (Neo4j)

EDUCATION

University of Waterloo

Sept '11 - Apr '17

Bachelor of Computer Science Honours

CONTACT

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