

# JESSE AKES

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## EDUCATION

### University of North Carolina at Chapel Hill

May 2019

- Bachelor of Science in Computer Science and Minor in Mathematics

## WORK EXPERIENCE

### Twitter (Seattle, WA)

Mar 2021 - Present

#### *Software Engineer II, Search Infrastructure Team*

- Owned, maintained, and enhanced Twitter's distributed tweet search indices including implementing parallel indexing of multiple independent data sources reducing startup and deploy time by half.
- Designed, lead, and wrote stability and performance features to Twitter's internal Search-as-Service platform:
  - Such as a configurable, automatic snapshotting feature to save and restore cluster state (ultimately reducing recovery time from 26 hours to 3 hours for one internal customer team).
  - And a dynamic, auto-scaling solution to load terabytes of data into Elasticsearch safely and efficiently (upwards of 4000000 documents indexed per second).
- Driver of team learning initiatives including monthly lunch and learn where members present technical workshops to peers, as well as weekly "thinking lounge" where distributed members can collaborate and discuss technical challenges.
- Designed project and mentored intern in technical work and implementation during Summer 2022.
- Conducted interviews, aiding in decisions to hire 2 members of the team.
- Co-wrote "Stability and Scalability for Search", posted on the public Twitter Engineering blog

### Amazon.com (Seattle, WA)

July 2019 - Mar 2021

#### *Software Development Engineer, Amazon Global Store Promotions and Customer Experience Team*

- Advocated for, designed, and implemented Amazon Global Store internal API as source of truth on global store products, providing consistent and accurate customer experience for both internal and retail customers, saving 100's of infrastructure dev hours when implementing new features
- Increased customer awareness of product origin and drove up OPS by upwards of 40% in some marketplaces by designing and implementing program badging of Amazon Global Store products worldwide
- Enabled free shipping for Global Store Customers in all Amazon Global Store marketplaces
- Implemented profitability filter as component of automated deal creation of Global Store Deals.
- Created team SOP and acted as mentor of Amazon's development, operational, and cultural standards for on-boarding new hires

### Amazon.com (Austin, TX)

May 2018 - Aug 2018

#### *Software Development Engineer Intern, FLASH-Order To Cash Team*

- Designed and implemented a new internal micro-service for bank account and bank file tracking for use by accountants and the OrderToCash Team
- Using AWS Lambdas, parsed bank account and bank file information from incoming transactions
- Designed and deployed a REST API for easy accessibility of the parsed data
- Wrote a ReactJS front-end to display account and file information/trends and to aid in quickly discovering missing remittances

### Fidelity Investments (Durham, NC)

May 2017 - Aug 2017

#### *Data Engineering Intern, Personal Investing Real Time Analytics Team*

- Implemented a cluster-wide monitoring system using the Elastic Beat framework to collect and ship metrics and application logs to data pipeline consisting of Apache Kafka and the Elastic Stack
- Deployed a real time alerting system based on Elastalert using the collected metrics and logs
- Designed and implemented custom Service-Now integration into Elastalert for ticket based alerting

## SKILLS

Languages	Python, Java, Scala/Scalding, Kotlin, C/C++, R, HTML/CSS, MySQL, ReactJS
Other Technologies	Linux, Git, Spring, Guice, Mockito, Hadoop, Kafka, AWS, Elasticsearch

## VOLUNTEER EXPERIENCE

### University of North Carolina - Chapel Hill (Virtual)

Aug. 2020 - Present

#### *Mentor, UNC CS Alumni Mentoring Program*

- Selected to be a part of the pilot alumni mentoring program for underclassmen in the UNC Computer Science Department and work with a sophomore student 1:1 to promote educational and career success by providing them with insight and support for their goals