

# 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

### Tumblr/Automattic (Remote - Seattle, WA)

Feb 2023 - Present

*Software Engineer II, Tumblr Search/Tumblr Notifications Team*

- Founding member of Tumblr's new Search and Notification teams, focusing on scalability and user growth by managing the Tumblr search indices, Feeds systems, and algorithmic push notification engine
- Reduced search indexing latency to near-realtime (order of seconds) from 3 minutes by refactoring and optimizing ingestion pipeline for post creation
- Increased user engagement by 8% through targeted recommendations and surfacing relevant content on user feeds via push notification

### Twitter (Seattle, WA)

Mar 2021 - Nov 2022

*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*

### Fidelity Investments (Durham, NC)

May 2017 - Aug 2017

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

## SKILLS

### Languages

Python, Java, Scala/Scalding, PHP, Kotlin, C/C++, R, HTML/CSS, MySQL, ReactJS

### Other Technologies

Linux, Git, Spring, Guice, Mockito, Hadoop, Kafka, AWS, Elasticsearch, Kubernetes, Spark

## 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