Derek Pham

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🎓 EDUCATION

Northeastern University, Bachelor of Science in Computer Science   Sept. 2016 - Apr. 2021
GPA: 3.98/4.0
Coursework: Algorithms and Data Structure, Networks and Distributed Systems, Large Scale Data Storage
                        Object Oriented Design, Software Development, Programming Languages

⚙ SKILLS

Languages: Java, Python, Kotlin, Clojure, Racket
Systems: PostgreSQL, MySQL, Elasticsearch, HBase, Amazon S3, Neo4J, MongoDB, Redis, Couchbase
                        Kafka, Kinesis, Hadoop, Spark, Storm, Amazon Glue
Others: Linux, Spring, Hibernate, Django, Git, Ansible, DropWizard

👥 EXPERIENCE

AMAZON, New York, NY   Jun. 2020 - Sept. 2020
Software Developer Intern - Delivery Experience
- Designed a debugging tool to help engineers retrieve exact HTML output that customers see, using Amazon S3, and Amazon Redshift

OKTA, Bellevue, WA   Mar. 2020 - Jun. 2020
Software Engineer Intern - Core Backend
- Built tooling around Okta's existing Elasticsearch infrastructure to migrate required documents to their own dedicated indices, using Spring, Apache Kinesis and Apache Storm

LINKEDIN, San Francisco, CA   Jan. 2020 - Mar. 2020
Software Engineer Intern - Talent Insights Foundations
- Designed a cache invalidation service for LinkedIn Talent Insights' backend API, which improved cache hit rate from ~80% to ~90%, utilizing Apache Kafka, Apache Pinot, and Couchbase secondary index
- Reduced data inconsistency window from 6 hours to at most 5 minutes, thus eliminated all related customer complaints and Jira tickets

YELP, San Francisco, CA   Jun. 2019 - Aug. 2019
Software Engineer Intern - Data Infrastructure
- Created a batch post-processor tool for Yelp's data lake with Apache Spark and AWS Glue, processing half a Terabyte per batch daily
- Simplified Athena and Redshift query patterns, and improved query performance with said tool by around 500x, enabling much quicker decision making for business analysts and data scientists

HUBSPOT, Cambridge, MA   Jan. 2019 - May. 2019
Software Developer Co-op - Connected Email Backend
- Migrated 2 Redis tables with hundreds of Gigabytes of data to HBase using Apache Hadoop, saving around $100,000 a year
- Redesigned the email scheduling system using MySQL, HBase and Amazon S3, which solved 5 different bugs that caused long-lasting Jiras

🐙 PROJECTS

freddie *A music recommendation app*
- Developed a simple web app in Spring Boot that recommends songs to users based on their music history
- Powered the recommendation and storage engines using Neo4J

doodle *A research project with Northeastern's Network Science Department*
- Developed an app in Django used to study how search ranking affects personal and political opinions
- Designed different CSS skins to mimic Google and Facebook

nualt *An easy-to-use alternative to Northeastern's career website*
- Created a web crawler in Python to mine hundreds of job postings on Northeastern's career website
- Built a simpler and faster website to display job postings using Kotlin, Spring Boot and jQuery