

Krit Goyal

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EDUCATION

Northeastern University , Boston, MA	Dec 2020
Khoury College of Computer and Information Sciences	
<i>Candidate for Master of Science in Computer Science, GPA: 4.0./4.0</i>	
<i>Related courses</i> : Large-Scale Parallel Data Processing, Information Retrieval, Game AI, Foundations of AI	
Birla Institute of Technology and Science(BITS) Pilani , Rajasthan, India	May 2017
<i>Bachelor of Engineering in Electrical and Electronics Engineering, GPA: 7.78/10</i>	
<i>Related courses</i> : Machine Learning, OOP, Data Structures and Algorithms, Operating Systems	

TECHNICAL KNOWLEDGE

Scripting:	Kotlin, Go, Java, Python, C#, Scala
Databases:	AWS Neptune graph, MySQL, DynamoDB, Firebase, sqlite3
Distributed Systems:	Hadoop Map-Reduce, Spark (Scala/Python)
Cloud and Infrastructure:	AWS, AWS CDK, Docker, Git, Firebase
Web technologies:	React.js, Typescript, Vue.js, Node.js, Express.js, PHP

WORK EXPERIENCE

Amazon , Santa Barbara, CA	
<i>SDE II, Alexa Knowledge Graph Vending Team / Graphiq Platform Team</i>	Dec 2022 - Present
<ul style="list-style-type: none">Developed PySpark scripts to process and ingest data into AWS Neptune, improving data pipeline efficiency by 90% for 100GB+ datasets in the Alexa Knowledge ecosystem.Performed away team work where I leveraged my expertise to setup their pipelines and integrate with the rest of the services in the organization, reducing lead time by 75%Implemented integration of Background Jobs system with Graphiq Knowledge Sandboxes, facilitating local testing by Software Development Engineers (SDEs) and Knowledge Engineers (KEs).Successfully migrated over 150 Background Jobs from PHP7 to PHP8, aligning with the latest standards and bolstering security measures.	
<i>SDE I, Graphiq Platform Team</i>	Feb 2021 - Dec 2022
<ul style="list-style-type: none">Successfully migrated of over 150 Graphiq Background Jobs from legacy EC2 managed instances to AWS ECS as a pivotal accomplishment. This migration yielded substantial enhancements in security measures and introduced streamlined deployment automation, thereby establishing a significantly more stable and maintainable system.Pioneered the development and execution of change mechanisms enabling seamless annual live upgrades for the five foundational databases of Graphiq's Knowledge Graph. This strategic initiative was executed while ensuring uninterrupted production traffic flow, achieving downtime of under 5 minutes.Architected a robust Gamma stage infrastructure utilizing AWS CDK, specifically for critical data stores including MySQL Aurora databases and AWS Opensearch domains. This encompassed end-to-end implementation, integrating comprehensive CI/CD processes. The resulting environment became a cornerstone for KEs and SDEs, facilitating easier development and rigorous testing.	
Uptodate, Wolters Kluwer , Waltham, MA	
<i>Web Developer, Intern, Core team</i>	Jan 2020 - May 2020
<ul style="list-style-type: none">Dockerized the fundamental UpToDate application and authored comprehensive setup documentation.Collaborated within the core team to enhance UI/UX and backend functionality using Angular, JSP (UI), and Java, Node.js, Spring Boot (backend microservices).Developed a new data migration tool for seamless multistage inter-database transitions alongside other interns.Leveraged Node.js and Express.js to craft the backend and Vue.js for the frontend. Delivered a holistic solution complete with thorough documentation and robust unit tests.	

PROJECTS AND ACTIVITIES

Backend Developer , WorkerB	Jan 2020 - April 2020
Developed a containerized server using Golang, Dgraph, MySQL, and Redis caching to optimize backend architecture, leveraging Docker for deployment and scalability	
Optimizing compiler inlining with Machine Learning , DMT, NEU	June - Aug 2019
Achieved 18.8% speedup by modifying NEAT-python to model and explore topologies for deep Neural Networks, execute our modified Glasgow Haskell Compiler(GHC), and benchmark using NoFib	