Loc Bui

hekl0.github.io

↓ (585) 441-8733
 ☑ loc.bui.411999@gmail.com
 ♠ github.com/hekl0
 ♠ linkedin.com/in/loc-bui

Awards & Honors

ICPC World Final 2022: 44^{th} place

C++

ICPC World Final 2021: 52^{nd} place

C++

Facebook Hacker Cup 2020: 389^{th} place

Credit Suisse Coding Challenge 2020: 1^{st} place

C++

Vietnam Olympiad in Informatics 2017: 16^{st} place

C++

Experience

Snowflake, Software Engineer

August 2022 - Present

- Worked with another engineer to implement Sub-Database Replication feature, which helps reducing costs by 70% for data sharing between different organizations use cases
- Designed, documented, and developed membership managing logic and constraints for Sub-Database replication feature to prevent data inconsistency and corruption
- Participated in the development of Account Replication feature and developed new thread manager to maximize utilization of worker threads and boosted replication performance by 20%
- Found and implemented a fix for under-billing bugs, which under-billed replication job by a 30% on average
- Found and implemented a fix for race conditions caused by half-dead computing instances and instances recovery
- Wrote documents and supported other teams to use replication and add new features/objects to replication flow
- Technologies: Java, Python, FoundationDB, Snowflake, Jenkins

Facebook, Software Engineer Intern

June - August 2021

- Worked on Creator Studio platform to support music labels and creators to understand their content performance in Facebook's family of apps and grow their business
- Developed data exporting feature to export metrics to CSV files using Exports (internal MapReduce framework)
- Implemented Top Country and Top Product APIs to help users understand know where their content performed best
- Technologies: Hack, React, Laser (internal data indexer for Hive), Saber (internal database), Exports

Snowflake, Software Engineer Intern

February 2021 - May 2021

- Tracked and stored database storage files' lifetime and churn rate in metadata for all tables in Snowflake
- Developed system function to monitor workloads and estimate replication costs upfront to decide replication frequency
- Debugged issues and proposed and implemented fixes for storage statistics management component
- Technologies: Java, FoundationDB, Snowflake, Jenkins

Projects

Techsphere, Web Application

August 2021 - Sep 2022

- A platform providing free mentorship for college students and junior software engineers with 4000+ singed-up users
- Designed and developed core flows of the platform including Authorization, Data Models, and Scheduling
- Discussed with Project Manager to plan product road map and analyze upcoming features
- Led a team of 5 engineers and utilized SCRUM model to manage and boost up performance of the team
- Technologies: React, Firebase Firestore, GCP Functions, GCP Hosting

Technical Skills

Languages: C++, Python, Go, Java, JavaScript, SQL

Technologies: React, Node.js, Flask, AWS, Azure, GCP, Spark, MySQL, MongoDB, Docker, Git

Experiences: Web & Android App Development, Distributed Systems, Cloud Computing, Database Development

Education

University of Rochester, Bachelor of Science in Computer Science

August 2018 - May 2022

- **GPA:** 3.79/4.0
- Relevant Coursework: Advanced Algorithms, Database System, Operating System, Networking