

jayant shrivastava

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skills

Experience with backend engineering, distributed systems, databases, cloud infrastructure, and data engineering

Languages Python • Go • Ruby • TypeScript • SQL • C++ • C • Yacc

Tools/Frameworks Kafka • Docker • Rails • gRPC • Airflow • CockroachDB • GraphQL • Node.js • React

experience

Cockroach Labs Software Engineering Intern

[September 2020, December 2020]

- Improved the speed & memory usage by 83% & 67% for sequenced bulk inserts in CockroachDB by building a cache in **Go**
- Increased test coverage by extending a random SQL generator to create and verify transactional schema changes in **Go**
- Expanded CockroachDB's supported SQL grammar, abstract syntax tree, and execution code using **Yacc & Go**

Shopify Backend Engineering Intern

[January 2020, April 2020]

- Built an asynchronous data exporting feature for large data sets facing 500+ app developers using **Rails & GCP** storage
- Developed metrics tracking features to actively record metadata from 300,000+ daily ads using **Ruby & Kafka** events
- Led the research and execution of adding static type checking to a large **Rails** project - featured on engineering blog
- Significantly reduced the negative monetary impact of click fraud by co-developing IP throttling features in **Ruby**

LCBO Software Engineering Intern

[May 2019, August 2019]

- Reduced page load time of a production app by >50% by implementing a client-side cache in a **JavaScript** serviceworker
- Secured sensitive APIs by developing **Node.js** middleware to support a RBAC strategy using **Azure AD** and **OAuth 2.0**
- Worked on a serverless ETL pipeline to parse and index thousands of spreadsheets into **MongoDB & Elasticsearch**
- Prototyped and deployed a product recommender system facing 250+ beta users using **Python & TypeScript Node**

Bonfire Interactive Software Engineering Intern

[September 2018, December 2018]

- Improved file download security by building **Go** services to run virus scans on 100% of user-uploaded files in **Amazon S3**
- Reduced the quarterly support tickets by >350 by automating issue detection and resolution using **Python & Airflow**
- Developed analytics dashboards in a core application facing users from 400+ companies using **TypeScript & React**
- Built endpoints and tests for the company's core **Node.js API** responsible for managing millions of dollars in assets

Paralucent Inc Web Applications Engineering Intern

[January 2018, April 2018]

- Improved deploy time for a production app by >20% by developing a new CI/CD workflow using **Docker & Azure** services

leadership, community, & awards

UWWiSTEM	Volunteered to run coding workshops and speak at events in support of diversity in STEM	2020
UWBlueprint	Co-developed apps for NPOs in support of various causes including education and civil rights	2019
16 Weeks	Created videos for a YouTube channel with 700+ subscribers to give students internship advice	2019
Delta Hacks	Won a \$1200-valued prize out of 76 teams for making an <u>app</u> to fetch emergency medical info	2018

projects

Buoy	Built a distributed key-value store backed by <u>Raft</u> tolerant of node failures & partitions (Go, gRPC)	<u>repo</u>
Autocompleter	Created a thread-safe text autocompletion library backed by a LRU cache and trie (Python)	<u>repo</u>
Groupchat	Developed a real-time chat messenger server and client (Go, gRPC, GCP, Docker)	<u>repo</u>

education

University of Waterloo

Graduating April 2022

BASc in Computer Engineering

4x Dean's Honors List, Cumulative Average: 91.56/100

interests

Basketball • Board Games • Tech for Social Good • Running • Gaming • Cooking