

# jayant shrivastava

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## skills

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

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

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

## experience

**Cockroach Labs** Software Engineering Intern [September 2020, December 2020]

- Added sequence caching to [CockroachDB](#) to improve the speed & memory usage of sequenced inserts by 83% & 67%
- Increased test coverage by extending a random SQL generator to create and verify schema change statements using **Go**
- Built new SQL features in CockroachDB by extending the abstract syntax tree and SQL execution code using **Yacc & Go**

**Shopify** Backend Engineering Intern [January 2020, April 2020]

- Built a scalable, offline-first data exporting feature for ad metrics facing 500+ users using **Rails & GCP** storage
- Developed data collection features to actively record statistics from 300,000+ daily ads using **Ruby & Kafka** events
- Implemented and deployed IP throttling features in **Ruby** to significantly reduce bot traffic and fraudulent click on ads
- Integrated a new type checking framework into a large ads infrastructure project built with **Rails** - [featured on eng blog](#)

**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
- Worked on a serverless **Node.js** ETL pipeline to parse and index 1000+ spreadsheets into **MongoDB & Elasticsearch**
- Prototyped and deployed a product recommendations engine facing 250+ beta users using **Python & TypeScript Node**
- Developed authentication middleware to secure sensitive API endpoints using **Node.js, Azure AD, & OAuth 2.0**

**Bonfire Interactive** Software Engineering Intern [September 2018, December 2018]

- Built **Go** microservices to perform virus scans on 100% of files uploaded to **Amazon S3** to improve download security
- Reduced 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 with **Docker & Azure** services

## leadership, community, & awards

Tech+ UW	Providing mentorship to help build a stronger, more diverse tech community at UW	Current
UWWiSTEM	Coordinated programming workshops and spoke at events in support of diversity in STEM	2020
UWBlueprint	Developed apps for NPOs in support of children's education, civil rights, and sustainability	2019
16 Weeks	Created videos for a YouTube channel with 700+ subscribers to provide internship insights	2019
Delta Hacks	Won a \$1200-valued prize out of 76 teams for making <a href="#">an app</a> to get emergency medical info	2018

## projects

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

## 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