

# Jayant Shrivastava

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## Education

BASc in Computer Engineering  
4th year, graduating **April 2022**  
University of Waterloo  
• **5x** Dean's Honors List  
• **92.24/100** Average

## Skills

### Languages

Python • Go • C++ • C • Java  
Scala • Ruby • SQL

### Tools/Frameworks

Kafka • Spark • MapReduce  
Hadoop • ZooKeeper • gRPC  
Airflow • Docker • Rails • Git

## Community & Awards

**Hack the North** • Present  
Leading an Intro to APIs  
workshop at Canada's biggest  
Hackathon w/ 3000+ attendees

### Tech+ UW • Present

Mentoring students and helping  
build a more diverse & inclusive  
tech community at UW

### UWBlueprint • 2019

Developed apps for NPOs in  
support of children's education,  
civil rights, and sustainability

### 16 Weeks • 2019

Created videos for a YouTube  
channel with 700+ subscribers  
to provide internship insights

### Delta Hacks • 2018

Won a \$1200-valued prize out of  
76 teams for making an app to  
get emergency medical info

## Projects

### Buoy (Go) • [link](#)

Built a distributed key-value  
store backed by Raft, tolerant of  
node failures & partitions

### Groupchat (Go, Docker) • [link](#)

Developed a real-time chat  
messenger server and client

## Interests

Basketball • Altcoins • Cooking  
Board Games • Fitness

## Experience



### Facebook

Software Engineering Intern

Present

Empowering data scientists across Facebook AI by working on a new programming language & compiler made in **Python** used to define data pipelines and ML features

Working to improve compiler latency in jobs which compile and deploy up to 6000+ ML features at a time using up to 4000 cores of compute



### Cockroach Labs

Software Engineering Intern

[Sept. 2020, Dec. 2020]

Contributed new features such as database prefixes to CockroachDB, an open-source SQL database used by 400+ companies in 1100+ global clusters

Improved SQL sequences to be 83% faster and use 67% less memory by implementing sequence number caching in **Go**

Increased database schema test coverage by extending a random SQL generator to create and verify schema changes in **Go**



### Shopify

Backend Engineering Intern

[Jan 2020, Apr. 2020]

Developed backend services to actively record statistics from 300,000+ daily advertisements using **Ruby & Kafka** events

Built a scalable, offline-first data exporting feature for ad metrics facing 500+ users using **Rails & GCP** storage

Implemented and deployed IP throttling features in **Ruby** to significantly reduce bot traffic and fraudulent clicks on ads

Integrated a new type checking framework into a large ads infrastructure project built with **Rails** - featured on engineering blog



### LCBO

Software Engineering Intern

[May 2019, Aug. 2019]

Reduced page load time of a production app by >50% by implementing a client-side cache using a **JavaScript** serviceworker

Worked on a serverless **Node.js** ETL pipeline to parse and index 1000+ spreadsheets into **MongoDB & Elasticsearch**

Developed authentication middleware to secure sensitive API endpoints using **Node.js, Azure AD, & OAuth 2.0**



### Bonfire Interactive

Software Engineering Intern

[Sept. 2018, Dec. 2018]

Built **Go** microservices to perform virus scans on 100% of user 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**