

# Chris Tan

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## WORK EXPERIENCE

### WISH | SOFTWARE ENGINEERING INTERN

Remote | Jan 2022 - Present

- Composed GraphQL schemas to model promotions for a new merchant promotions project, creating Graphene objects and resolvers that convert and calculate discounts based in USD and applies them onto price costs that are currency-based local to the merchant.
- Spearheaded development of a **Mealy finite-state-machine** of Wish return request project, designing a new data model and appropriate transition functions in **Python**.
- Cooperated with business-side clients to calculate gross merchandise value, creating scripts to query from MongoDB and to write to excel sheets for quarterly reviews.

### ELECTRONIC ARTS | SOFTWARE ENGINEERING INTERN

Remote | May 2021 - Aug 2021

- Engineered a Kotlin Spring Boot data collection service to integrate external data brokers such as Quests and Marketplace APIs into one service layer, enabling **code scalability** for Apex and Battlefield 2042 teams.
- Designed and revamped Protobuf files and **unary/bidirectional gRPC endpoints** to implement a new field to enable bypassing of Redis caches to internal data brokers.
- Presented an internal backend service to over **500+** EA Digital Platform executives and employees, hosting an online booth to promote and popularize Rules Engine's internal use.

### INSTICATOR INC. | BACKEND ENGINEERING INTERN

Remote | Sep 2020 - Dec 2020

- Created an API request **backup functionality** by storing request JSONs in an **AWS S3 Bucket**, integrating a restore parameter to roll back executed requests, serving **1000+** endpoint calls in the first week.
- Developed a Java Play Framework backend API to enable and disable supply-side platforms via Twirl Scala front-end templates, allowing clients to change advertisement subscriptions.
- Authored a Redis cache and deployed as a **Docker container**, storing clientele advertisement data in caches to reduce API latency by **98%**.

### SCOTIABANK | SOFTWARE DEVELOPER INTERN

Toronto, ON | Jan 2020 - Apr 2020

- Directed development and design of a Java Spring Boot application that queries JDBC H2 databases for wire transactions, utilising Spring Hibernate/JPA API to connect to a React front-end.
- Increased business analysis productivity by **48%** by implementing **inversion of control/dependency injection** principles, creating a Spring Boot application that ran MySQL queries and parsed data into .csv files.
- Practiced **Model-View-Controller** software architecture within Spring Boot applications to enable loose coupling.

## PROJECTS

### COMMENTIQUETTE [↗](#)

RNN, PYTHON, TENSORFLOW, KERAS, FLASK

- Developed a multi-layer recurrent neural network to develop fake comments of particular YouTube channels, hosted on Flask. Trained the model with datasets made with Python scripts.

### INK'D [↗](#)

REACT.JS, SERVERLESS, AWS (S3, LAMBDA, DYNAMODB, API GATEWAY, COGNITO)

- Assembled a complete **Serverless** framework web application that provides writing project skeletons for idea/project creation for creative writers, leveraging **AWS** to create API layer, store objects, and user auth.

## SKILLS

Languages: Java, Kotlin, C++, Python, C, Javascript, Scala, MATLAB, HTML/CSS

Frameworks: Spring, Play, Node, Express, React, Tensorflow, Flask, Serverless, Mockito

Technologies: Git, AWS, Maven, Gradle, MongoDB, UNIX/Ubuntu, Docker

## EDUCATION

### University of Waterloo

Waterloo, ON | Sept 2019 - Present

BASC. IN COMPUTER ENGINEERING

cGPA: 3.840/4.0