

# Chris Tan

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## EDUCATION

### University of Waterloo

BASc. IN COMPUTER ENGINEERING

Term GPA: 3.956/4.0

cGPA: 3.840/4.0

Waterloo, ON | Sept 2019 - Present

## WORK EXPERIENCE

### ELECTRONIC ARTS | SOFTWARE ENGINEERING INTERN

Vancouver, BC | May 2021 – Aug 2021

- Engineered a Kotlin Spring Boot data collector service to extract external data brokers such as Quests and Marketplace APIs into one central service layer, enabling 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 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

Kitchener, ON | Sep 2020 - Dec 2020

- Created API request backup functionality by storing executed request JSONs in an AWS S3 Bucket, integrating a restore parameter that undid 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.
- Architected a Redis cache and deployed as a Docker container, storing clientele advertisement data in caches to reduce API latency by 98%.
- Authored a Repository model to allow for abstraction between business and database layer, allowing for minimal code changes upon additional fields in database tables.

### SCOTIABANK | SOFTWARE DEVELOPER INTERN

Toronto, ON | Jan 2020 – Apr 2020

- Spearheaded 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.
- Conducted JUnit tests and acceptance tests using Cucumber testing tool.

## 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.
- Leveraged AWS Lambda, API Gateway, to develop the backend API layer, DynamoDB to store objects, and Cognito for user authentication.

## SKILLS

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

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

Technology: Git, AWS, Maven, Gradle, MongoDB, Docker