

# DAN CHOI

## SOFTWARE ENGINEER

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## SKILLS

- JavaScript
- Java
- Android
- React
- SQL
- REST
- Git
- G Suite
- TypeScript
- Kotlin
- Python 3
- Node.js
- AWS
- GraphQL
- Splunk
- Photoshop

## PERSONAL PROJECTS

### METROFEED

Raspberry Pi + LED matrices for weather graph and transit ETAs

### INKTOBER 2022

JavaScript + p5.js visualizers for 60-sec remixes made in Ableton

### RACCACOOONIE-BOT

Raspberry Pi + Arduino robot receiving Wear OS sensor data

### ATARI TEMPEST LITE

JS game drawn using trig math

### CITYSOUNDS

React/Rails clone of Bandcamp

## EDUCATION

🎓 **Cornell University, 2014**  
College of Arts & Sciences  
– Bachelor of Arts

📖 **App Academy NYC, 2017**  
– Full Stack Bootcamp

## WORK EXPERIENCE

### INSTAGRAM

Software Engineer

NEW YORK, NY

Sep 2021 – Nov 2022

#### SINGLE-TRANSCODE REELS UPLOAD (ANDROID)

Upload latency/quality upgrade eliminating 1x write to temp video file

- Articulated and executed rollout strategy for architecture update to consolidate two video file encodes into one by leveraging new in-house multi-track video data structure, next-gen GL rendering stack for filters/overlays, and IG video upload client infrastructure
- Bootstrapped QA test plans covering all IG Reels creation entry/exit points to identify and mitigate integration failures between Reels product, audio encoding, GL rendering, and IG video upload infra
- Achieved -6.3% publish ready latency, +0.09 predicted MOS quality

### TOAST

Software Engineer

BOSTON, MA

Oct 2017 – Jul 2021

#### TOAST NOW ORDERS (WEB/BACKEND)

Freemium “inbox” app to manage cashless online orders amid COVID-19

- Shipped React/Redux frontend, Node/GraphQL BFF, and Play backend controllers to unblock online ordering functionality without requiring Toast hardware to centralize order processing
- Reverse-engineered internal tooling to unblock authentication, service discovery, and deployment to AWS following mass layoffs
- Set up dashboards and alerts using Datadog, Splunk, Sentry, and Apollo Graph Manager to monitor app health for 2400+ customers
- Onboarded/mentored 2 internal transfers and 1 new hire on team

#### ORDER ACTIVITY V2 REFACTOR (ANDROID)

Legacy Android ordering screen using “big ball of mud” architecture

- Split legacy order processing logic into distinct presentation and service layers using command pattern within 5 months
- Refactored menu modifiers UI to MVI architecture in Kotlin; increased JUnit test coverage of 1200-line reducer from 0% to 94%
- Formulated and drove performance monitoring strategy leveraging UI telemetry and Splunk; supported rollout of MVI refactor to 100%

### NYU LANGONE HEALTH

Research Assistant

NEW YORK, NY

Oct 2014 – Aug 2016

- Investigated prospective microRNA treatments for chronic pain; published as second author in *Neuroscience* (August 2018)
- Cleaned ADNI data on cognitive effects of NSAID use; published as second author in *Scandinavian Journal of Pain* (October 2017)