

# Dominic Zirbel

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 github.com/dzirbel

**SUMMARY** Senior Android engineer with expertise in Kotlin, Compose, Android architecture, and Gradle

## WORK EXPERIENCE

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THUMBSTACK · *Senior Software Engineer* · June 2018 – May 2023 (5 years)

- On the Growth team (2018–20), I built features on the Kotlin Android apps and backend in Go/PHP/Python.
- As the sole Android engineer on the Platform team (2020–23), I was responsible for app architecture, CI/release pipelines, build tools, and developer productivity across the Android team of ~15 engineers.
- I conceived, planned, and drove adoption of new technologies including MVVM, Compose, Jetpack Navigation, and Coroutines, culminating in a new UI framework  Cork.
- With a promotion to Senior Software Engineer in September 2021 I focused in particular on mentoring, building team expertise, and encouraging best practices.

THUMBSTACK · *Software Engineering Intern* · Summer 2017


Rebuilt the login flow for Thumbstack's Android customer app in Kotlin and launched it as an A/B experiment

IMAGING SYSTEMS TECHNOLOGY · *Engineering Intern* · Summer 2016

Developed an Android tablet app to monitor and control a manufacturing process via Bluetooth

AGILE OASIS TECHNOLOGIES · *Full-stack Intern* · Summers 2015 and 2013

Full-stack design and engineering for a variety of contracted websites

METABOLISMFUN  · *Full-stack Contractor* · July 2013 – Jan 2015


Created an online educational game with Dr. Neocles Leontis at BGSU to teach metabolic pathways



PERSONAL ROBOTICS, CMU · *Research Intern* · Summer 2012

Built an Android tablet app to provide a simple interface for controlling the humanoid robot HERB via ROS




## PROJECTS

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 **KOTIFY** Desktop client for Spotify I created to improve library management for power users. Features include track ratings, genre organization, and improved performance with aggressive local caching. Built in Kotlin with Compose Multiplatform and Spotify's web API.  
May 2023 – Present


**OPEN SOURCE** Contributed to open source projects including  detekt and  assertk

Created and published open source libraries, including:

-  compose-material-context-menu, an implementation of context (right-click) menus for Compose Multiplatform
-  gson-bijectionreflection, a library enforcing strict deserialization of JSON
-  robopower, an engine and heuristic-based AI players for a simple card game

## SKILLS

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 **ANDROID** Comprehensive knowledge of the native Java and Kotlin APIs, build tools, and modern architecture components including MVVM, Compose, Jetpack Navigation, and Coroutines  
Experience deploying and maintaining apps with millions of users

**PROGRAMMING** In-depth experience with Kotlin/Java; comfortable with Go, Rust, and Python  
Full-stack experience: GraphQL, Go, PHP, SQL, JavaScript, and HTML/CSS

**MATHEMATICS** Strong academic core with a focus on Analysis, Combinatorics, and Abstract Algebra

## EDUCATION

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CARNEGIE MELLON UNIVERSITY · Class of 2018

B.S. in Mathematical Sciences with an additional major in Computer Science