Hadi Lashkari Ghouchani

Software Engineer

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Summary

Dedicated software developer with 19+ years of experience, including 9 years in professional Android develop-
ment. Skilled in software architecture, algorithm design, and machine learning applications.
- Expertise in creating scalable, maintainable, and efficient software
- Strong advocate for SOLID principles, SSOT, pure functions, and stateless design
- Passionate about applying machine learning to improve human life
- Experience teaching algorithms and programming at university level
- Committed to continuous learning and open-source contributions
- Proactive, and transparent, in technical decision-making
Comprehensive mastery of Android ecosystem, from low-level system interactions to high-level app architecture.
Eager to collaborate with creative, motivated teams in challenging technical environments.

Experience

Lead Android Developer

at CIBC (via Vision Talent)   📅 March, 2025 - Present   ⚲ Toronto, Canada

The Canadian Imperial Bank of Commerce is a Canadian multinational banking and financial services cor-
poration headquartered at CIBC Square in the Financial District of Toronto, Ontario.

Technologies:
- Kotlin Multiplatform, Compose Multiplatform, Gradle Plugin

Software Engineer -> Productivity Engineer

at Bell Canada (via MobileLIVE)   📅 Aug, 2022 - Nov, 2024   ⚲ Toronto, Canada

Promoted to Productivity Engineer.

Mission:
- Resolved VPN network proxy and self-signed certificate issues by developing an automated installation script and Compose Multiplatform app, resulting in a 164% increase in build count on the Gradle Enter-prise(Develocity) dashboard.
- Initiated and implemented Gradle Conventional Plugins to reduce code duplication and errors. Established Single Source of Truth (SSOT) for external library versions, significantly reducing runtime crashes caused by version conflicts.
- Spearheaded the adoption of Merge Trains and Merge Request Pipelines in GitLab, creating a Proof of Con-cept (POC) workflow that demonstrably improved code quality and streamlined the integration process.
- Optimized test execution, reducing incremental runtime by 52% and improving overall development effi-ciency.
- Served as the primary resource for build-related training and support across a team of 50+ Android de-velopers, enhancing team productivity and knowledge sharing.
- Implemented a custom No-Framework dependency injection solution across multiple app and library repositories, enhancing modularity, testability, and maintainability while minimizing build times by avoid-ing code generation.
- Integrated Detekt to verify code quality in the merge request's pipelines.

Additional Technologies:
- Develocity(Gradle Enterprise), Gradle Conventional Plugin, Detekt
- Kotlin Multiplatform, Compose Multiplatform

Software Engineer

at Bell Canada (via MobileLIVE)   📅 Apr. 2021 - Aug. 2022   ⚲ Toronto, Canada

MobileLIVE: A Canadian tech-service provider specializing in digital transformation solutions. Bell Canada:
Canada's largest telecommunications company, offering mobile services (Bell Mobility, Virgin Mobile), television
(Bell Satellite TV, Bell Fibe TV), and internet services across the country.

Mission:
- Implemented a Request for Comments (RFC) process for technical decision-making, streamlining the eval-uation and adoption of new ideas across the organization.
- Led regular knowledge-sharing discussions across the team on SOLID principles, modularization best practices, feature flag implementation, and monorepo architecture, elevating the team's overall code qual-ity and architectural design skills.
- Conceived and executed an automated system for cloning and building source code across a multi-repo setup, significantly reducing version conflicts and enhancing code visibility for efficient debugging.

Technologies:
- Kotlin Coroutines / Mockk, Mockito, jUnit, etc.
- Agile, Sprint, Lane based branching strategy, CI/CD
- Atlassian Jira, Atlassian Confluence, Gitlab, Jenkins, Slack, Branch.io, inVision, Dynatrace, etc.

Staff Android Developer

at iFood (via Letgo)   📅 Oct. 2020 - Mar. 2021   ⚲ Barcelona, Spain

iFood is a leading food delivery platform, dominating markets in Brazil, Colombia, and Mexico. It's the
market leader in Latin America with 50+ million Android app installations.

Mission:
- Initiated and executed a strategy to refactor legacy code out of the root module, resulting in a 55% de-crease in incremental build time and improved overall system architecture.
- Spearheaded the implementation of composite build for Gradle dependency management, reducing in-cremental build time from 13+ minutes to under 60 seconds when updating libraries.

Technologies:
- Dagger 2, Room, Kotlin Coroutines, Moshi, WorkManager / Mockk, Robolectric, jUnit, etc.
- Agile, Sprint, Github Flow, CI/CD, Gradle Enterprise
- Atlassian Jira, Atlassian Confluence, Github, Jenkins, Slack, Databricks, Firebase, Bugsnag, Logzio, etc.

Senior Android Developer

at Letgo: Leading Classified Marketplace   📅 Oct. 2019 - Mar. 2021   ⚲ Barcelona, Spain

One of the largest classified marketplaces in the United States at the time. Market leader in Turkey with
15+ million Android app installations. Mission-critical achievement: Optimized feed loading performance,
reducing launch time by over 60 seconds.

Lead Android Developer

at Sheypoor: Top-Tier Classified Marketplace   📅 Jan. 2018 - Jan. 2019   ⚲ Tehran, Iran

Impressive user base: 13+ million overall users, 1.5+ million daily active users. High engagement: 344+
million sessions. Key Achievement: Spearheaded initiatives that tripled daily active users from 500,000 to 1.5+
million within one year.

Senior Android Developer

at Myket: Top-Tier App Store and Social Network   📅 Sep. 2015 - Des. 2017   ⚲ Tehran, Iran

Java and C# developer

at Soha System   📅 Mar. 2015 - Aug. 2015   ⚲ Tehran, Iran

Article / Repository

Ⓜ 2024 Post: Matrix Fast Fourier transform(MFFT) - An optimization for Matrix Multiplication
Ⓜ 2024 C Numbers: This is a collection of number types, including floating numbers and p-adic numbers.
Ⓜ 2024 Post: Not All codes are liabilities
⌒ 2024 Contribution to HF Candle: HF Candle is a Rust alternative to work with LLMs.
⌒ 2024 City of Toronto RAG GPT: The project received the second position award in the TMLS Hackathon.
⌒ 2024 Hair Segmentation: A ML model to detect and segment hair in images
⌒ 2024 dragon detector: A simple ML model to detect dragon in images
⌒ 2024 Sample Rust App: A sample app to crawl an API and put the data in a database.
⌒ 2024 Nix Effect pod: Modularize effects of all kinds, and stay in-control, with NixOS and podman.
⌒ 2023 Sample App: Refactored a Mastodon client app to a modularized Jetpack Compose-driven architecture.
Ⓜ 2023 Post: Dependency Inversion Principle
⌒ 2023 Contributing to nixpkgs/androidenv: Nix is a language that is designed to have reproducibile output.
Ⓜ 2022 Post: Logic Tree in Android
Ⓜ 2022 Post: Reproducibility
Ⓜ 2022 Sample App: Molecule sample app to solve some scoping problems in Android development.
Ⓜ 2022 Post: Reproducibility
Ⓜ 2021 ProAndroidDev post: Are feature flags, build variants, and sample apps related concepts?
Ⓜ 2021 iFood Engineering post: Modularization tip: optimize the Root Module.
Ⓜ 2021 ProAndroidDev post: Happy Railway. An improvement for Railway Oriented Programming in Kotlin.
⌒ 2021 Library: Happy is a library to auto-generate Kotlin code to make calling APIs more concise.
⌒ 2020 POC: Rust Flutter Reactive is an idea to use Flutter as UI and Rust for the main project.
⌒ 2020 Make Log4k Multiplatform: Simple logging library for Android, iOS, Mac, etc.
Ⓜ 2020 ProAndroidDev post: A/B Testing Myths
⌒ 2020 Sample App: Provide a full implementation for a No-Framework Dependency Injection in Kotlin
⌒ 2020 Contributing on Λrrow Library: Λrrow is a library for Typed Functional Programming in Kotlin
⌒ 2020 Library: A Kotlin compiler plugin that generates trackable method
Ⓜ 2020 Medium post: Save State By Using RxJava or Kotlin Flow
Ⓜ 2020 Medium post: RxJava instead of LiveData in MVVM
⌒ 2020 Library: A glue between the lifecycle of LifecycleOwner in Android and upstreams in RxJava
⌒ 2020 Library: A glue between the lifecycle of LifecycleOwner in Android and Kotlin Coroutines
⌒ 2020 Library: Simplifier for unnecessary complex lifecycles
⌒ 2019 Sample App: Functional Programming + Clean Architecture
⌒ 2019 Sample App: Movie Challenge
⌒ 2019 Math Library: Modularized, mathematical and multiplatform Kotlin library
Ⓜ 2018 ProAndroidDev post: Logging in Kotlin
⌒ 2018 Log4k Library: Easy logging library, but unfortunately it's in Sheypoor repository
Ⓜ 2018 ProAndroidDev post: Reactive MVVM architectural pattern

Education

Sharif University Of Technology	M.Sc	in Physics	📅 Feb. 2010	⚲ Tehran, Iran
Payame Noor University	B.Sc	in Physics	📅 Jul. 2007	⚲ Mashhad, Iran

Tools / Skills

Kotlin Multiplatform/KMP

Compose Multiplatform/Android/iOS/Desktop
Professional Summary, Interests, and Insights:
- Advocate for independent UI/UX from platform.
- Main Contributor of Log4K
- Main Contributor of LifecycleHandler

Android

Android Architecture Components/JetPack
Anvil/Dagger 2/RxJava 2/Retrofit 2/...
Kotlin Multiplatform/Kotlin Coroutines
custom Kotlin Compiler Plugins/...
custom KSP plugins/...
Jetpack Compose/View Binding/...

Professional Summary, Interests, and Insights:
- Android is partially open source OS.
- He generally interested in distributed computations.

Software Architecture

Clean Architecture/Hexagonal Architecture
Unidirectional data flow Architecture
Stateless Architecture
Logic Tree Architecture
MVVM/MVI/MVP/RMVVM

Principle

Clean Code/SOLID
Object Oriented Programming
Functional Programming
Isolation/Reproducibility
Stable Dependencies Principle
Stable Abstractions Principle

Design Pattern

Factory/Builder/Singleton/...
Adapter/Facade/Proxy/Visitor/Delegate/...
Strategy/Chain of responsibility/...

Modularization Strategies

Applying DIP/Decrease incremental build time
Code isolation to reduce dependencies

Continuous Integration/Deployment

Jenkins, GitLab CI, Fastlane

Android Performance Optimization

memory management/threading/profiling tools

Android Security

encryption/secure networking/permissions model

Android Test and Verification

Unit/Integration/Mockito/Espresso/JaCoCo/...
Detekt plugins/Konsist

Android Build System

ProGuard/R8/custom Gradle plugins

Build Tool

Nix/Gradle/Cargo/Sbt/Maven/Ant/Make/...

Command Line Tool

tmux/bash/grep/sed/netstat/awk/podman/...
adb/sdkmanager/avdmanager/...

Rust

actix/rusqlite/tokio/thiserror/crossbeam
tonic/prost/openssl/flatbuffers/thrift
Rc/Arc/Mutex
FFI

Professional Summary, Interests, and Insights:
- Rust's type system is what you need for scale-up.
- Borrow Checker restrictly stops any memory leaks.
- The second most efficient programming language.

Podman/Docker

Buildkit/Compose/Cache

Professional Summary, Interests, and Insights:
- Reproducibility is the key to productivity.
- Isolation is the key to reproducibility.

Nix

NixOS/Nix Darwin
mkDrivation/mkShell

Professional Summary, Interests, and Insights:
- Reproducibility and isolation are guaraneed.
- Respecting pure functions, building block of caching.
- More consistent caching experience than containers.
- Honored to be a NixOS Maintainer (2023-Present).

Programing Language

Kotlin/Rust/Python/Java/Scala
Groovy/Dart/Javascript/Ruby...

Workflow

Trunk Based development/Github flow/Git Flow
Cross-functional team

Operating System

Linux(NixOS/Fedora/Ubuntu/Debian), MacOS

Achievements and Recognition

- 2025 Had an offer from CIBC via Vision Talent
- 2024 Had an offer from Accenture via Experis
- 2024 First position in National Health Datathon
- 2024 Second position in AWS Summit's Gameday
- 2024 Second position in Toronto Machine Learning #TMLS Hackathon
- 2020 Had an offer from MobileLIVE, Toronto, Canada
- 2020 Had an offer from iFood, Remote
- 2019 Had an offer from Kik, Kitechener, Canada
- 2019 Had an offer from Letgo, Barcelona, Spain
- 2019 Had an offer from CRITICAL Techworks, BMW, Porto, Portugal
- 2019 Had an offer from The Next Big Thing, Berlin, Germany
- 2018 Received result-oriented badge in Sheypoor
- 2007 Ranked 44th among more than five thousand participants in the National Graduate Entrance Exam in Physics

Language

English: Advance
Farsi: Native