S.Leschev iOS Developer Roadmap

🏆 Awards

Ranking #Dev: Global TOP 300 ([Certificate](#))

Sergey Leschev
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Rank 386

IT-Entrepreneur / Tech Lead. Sailor Of The Year 2016, 2017. Winner ProGolf 2018, 2019. #sailing #golf #tennis

Solved Problems

1682 Solved

Easy	463 /566	Beats	99.96%
Medium	890 /1199	Beats	99.96%
Hard	329 /488	Beats	99.93%

Languages: Swift, Shell, Database (T-SQL, PL/SQL, MySQL), Concurrency (Python3).

Algorithms: linked lists, binary search, hash table, queue/stack, dfs/bfs, sort, heap/hash, two pointers, sliding window, tree, greedy problems etc.

Golden Award Muad'Dib's Challenge

Languages: Swift.

Algorithmic skills: Dynamic programming, Greedy algorithms, Binary search, Stack and Queues, Sorting, Time Complexity.

Contest: Algorithms, Data Structures.

Tapping on a link will take you to relevant certificates.

- ☑ `iOS Developer`
  - ☑ `Practical knowledge`
    - ☑ Languages
      - ☑ Swift
        - ☑ Closures
        - ☑ Initializers
        - ☑ Generics
        - ☑ Protocols
        - ☑ Structs
        - ☑ Enums
        - ☑ Runtime
          - ☑ Method dispatch
    - ☑ Memory management
      - ☑ Stack and Heap
      - ☑ Value vs Reference type
      - ☑ MRC
      - ☑ ARC
        - ☑ Weak references
      - ☑ Retain cycles
      - ☑ Garbage collection
      - ☑ Memory leaks
      - ☑ Shallow and deep copying
      - ☑ Autorelease pool
    - ☑ Multithreading and concurrency
      - ☑ POSIX and NSThreads
      - ☑ Perform selector family
      - ☑ GCD
      - ☑ NSOperation(Queue)
      - ☑ Runloop
      - ☑ Synchronization
      - ☑ Problems
        - ☑ Race condition

- [x] Work in background mode
- [x] Software Architecture
  - [x] Design Patterns
    - [x] Cocoa
      - [x] Abstract Factory
        - [x] Class cluster
      - [x] Adapter
      - [x] Command Pattern
      - [x] Chain of Responsibility
      - [x] Decorator
        - [x] Delegation
        - [x] Categories
      - [x] Facade
      - [x] Memento
      - [x] Observer
      - [x] Proxy
      - [x] Receptionist
      - [x] Singleton
      - [x] Template Method
      - [x] MVC
    - [x] Architectural
      - [x] MVC
      - [x] MVVM / UIKitPlus
      - [x] MVP
      - [x] Clean architecture
        - [x] VIPER
        - [x] RIBs
      - [x] Coordinators
    - [x] Creational
      - [x] Factory
      - [x] Abstract Factory
      - [x] Builder
      - [x] Factory Method

- [x] Swift Package Manager
- [x] Project structure and File/Group organisation
- [x] `Version Control Systems`
  - [x] `Git`
- [x] Debugging
  - [x] Instruments
  - [x] Best practices
    - [x] Checklists
- [x] UX
- [x] `Caching and Persistency`
  - [x] Core Data
  - [x] Realm
- [x] `Testing`
  - [x] `Unit Tests`
  - [x] Snapshot Tests
  - [x] Functional test
  - [x] UI Tests
  - [x] TDD
  - [x] BDD
- [x] Performance optimization
  - [x] Increase FPS
  - [x] Decrease memory footprint
- [x] Code signing
- [x] Tools
  - [x] IDE
    - [x] Xcode
      - [x] Interface Builder
  - [x] Swiftlint
  - [x] Sourcery
  - [x] Fastlane
  - [x] Charles
- [x] Continuous Integration
  - [x] Github Actions / Jenkins

- ☑ Xcode server
- ☑ Security
  - ☑ Keychain
- ☑ tvOS
  - ☑ Focus interactions
- ☑ WatchKit
- ☑ `Computer Science knowledge`
  - ☑ `Algorithms` `certificate`
    - ☑ `Sorting` `certificate`
    - ☑ `Graph Theory` `certificate`
      - ☑ `Trees` `certificate`
    - ☑ `Strings` `certificate`
    - ☑ Greedy `certificate`
    - ☑ Dynamic Programming `certificate`
    - ☑ Bit Manipulation `certificate`
    - ☑ `Recursion` `certificate`
    - ☑ Game Theory `certificate`
    - ☑ NP Complete `certificate`
    - ☑ `Big-O notation` `certificate`
  - ☑ `Abstract Data Types` `certificate`
    - ☑ `Stack` `certificate`
    - ☑ `Array` `certificate`
    - ☑ `List` `certificate`
    - ☑ `Map` `certificate`
    - ☑ Multimap `certificate`
    - ☑ `Set` `certificate`
    - ☑ Multiset (Bag) `certificate`
    - ☑ `Graph` `certificate`
      - ☑ Tree `certificate`
    - ☑ `Queue` `certificate`
    - ☑ Priority Queue `certificate`
    - ☑ Double-ended priority queue `certificate`
    - ☑ Double-ended queue `certificate`

- ☑ `System design`
  - ☑ [Design large-scale systems / Amazon, Dropbox, Instagram, Facebook, Netflix, Pinterest, Twitter, Uber, Youtube](#)
- ☑ Programming Paradigms
  - ☑ Object-Oriented
  - ☑ Functional
    - ☑ Functional Reactive Programming Frameworks
      - ☑ [React Native](#)
      - ☑ [RxSwift](#)
      - ☑ RxRealm, RxDataSources
      - ☑ Combine

Project Guidelines

A set of best practices in my projects.

- ☑ Git
- ☑ Documentation
- ☑ Environments
- ☑ Code Style
- ☑ Logging
- ☑ API

Licenses & certifications

- 🏆 LeetCode Global TOP 300 (Swift: Certificate, Sources: Swift).
- 🏆 Golden Award Muad'Dib's Challenge (Swift: Certificate, Sources: Swift).
- LinkedIn Skill Asessment (Mobile): Swift (Programming Language), Object-Oriented Programming (OOP), Objective-C, C++, Ionic, JSON, XML, Android, Kotlin, Maven, Java, REST APIs.
- 🍎 Health & Fitness iOS App / Fitness Motivation / AppStore (Sources: SwiftUI) @ S. Leschev.
- 🍎 Utility MacOS App / Calc-It / Core (Sources: Swift) @ S. Leschev.

Latest Projects

[iOS] Live Stream & Video Chat is the best streaming and video chatting tool.

Role: Senior iOS Developer, Tech Lead. Development architecture and new features.

Tech Stack:

- Swift 5+.
- VIPER (Dependency Injection, Assembly, Services, Interactor, Presenter, State, Adapter) + MVVM (Combine, PromiseKit).
- Alomofire, Decodable, Combine.
- GCD/Operations.
- Agora Video SDK, Chat SDK, Beautification SDK. WebRTC. GRPC.
- Modular architecture (Frameworks, Development Pods).
- SwiftGen (Localization, Image, Colors).
- SwiftLint.
- Auth: Facebook, Google, Apple ID.
- Firebase, Crashlytics, Amplitude, AppsFlyer.
- Push-notifications (Firebase).
- UIKit, Autolayout, Core Animations, Skeleton, Lottie.
- Git (Flow, CodeReview), Figma.

[iOS] Health & Fitness iOS App

Role: Senior iOS Developer, Tech Lead. Development architecture and new features.

Tech Stack:

- Swift 5+.
- Clean Swift Architecture.
- Alamofire, ObjectMapper.
- GCD/Operations.
- AVFoundation, Streaming: HLS (Cloudflare/nginx).
- AirPlay [Composition (video+audio), Secondary Display].
- Realm.
- Modular architecture (Frameworks, Development Pods).
- SwiftGen (Localization, Image, Colors).
- SwiftLint.
- Auth: Facebook, Google, Apple ID, Fitbit.
- Amplitude, Crashlytics, AppsFlyer (+OneLink).
- Analytics: Facebook (SKAd + Conversions API).
- Push-notifications (OneSignal).
- UIKit, Autolayout, Core Animations, Lottie.
- Git (Flow, CodeReview), Zeplin, Figma, Sketch.

[iOS] Health & Fitness iOS App (Motivations Coach, Pet Project)

Role: iOS Developer.

Tech Stack:

- SwiftUI.
- Watch Extension (WatchOS).
- AppClip Extension.
- Widget (iOS 14).
- ObjectMapper.
- URLSession.
- Keychain.
- Lottie.
- Push Notifications.
- GCD/Operations.
- Git, Figma, Sketch.

Website: motivations.coach

Sources: SwiftUI

Contacts

I have a clear focus on time-to-market and don't prioritize technical debt.

🛩️ #startups #management #cto #swift #typescript #database

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