# S.Leschev iOS Developer Roadmap



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

















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

Lar	nguages
$\checkmark$	Swift
	✓ Closures
	✓ Initializers
	✓ Generics
	✓ Protocols
	✓ Structs
	✓ Enums
	Runtime
	Method dispatch
Mer	mory management
$\checkmark$	Stack and Heap
$\checkmark$	Value vs Reference type
$\checkmark$	MRC
$\checkmark$	ARC
Wea	ak references
$\checkmark$	Retain cycles
$\checkmark$	Garbage collection
$\checkmark$	Memory leaks
$\checkmark$	Shallow and deep copying
$\checkmark$	Autorelease pool
Mu	ltithreading and concurrency
$\checkmark$	POSIX and NSThreads
$\checkmark$	Perform selector family
$\checkmark$	GCD
<b>/</b>	NSOperation(Queue)
<b>~</b>	Runloop
<b>~</b>	Synchronization
<b>~</b>	Problems
	✓ Race condition
	Mer V V V V Mu V V V V

	<b>✓</b>	Deadlock							
	<b>√</b>	Readers-writers problem							
Cod	coa	Touch							
$\checkmark$	UIH	Kit							
	<b>V</b>	UIApplication							
		✓ States							
		✓ UIApplicationDelegate							
	<b>~</b>	UIViews							
		✓ UITableViews							
		✓ UICollectionViews							
	$\checkmark$	Layers							
	$\checkmark$	Layout							
		✓ Frame-based							
		✓ Autolayout							
		✓ UIStackView							
	$\checkmark$	Animations							
	$\checkmark$	Transform							
	$\checkmark$	Navigation							
	$\checkmark$	UIViewController							
		✓ Lifecycle							
$\checkmark$	Fou	undation							
	$\checkmark$	Notifications vs Delegation vs Observing							
	<b>~</b>	Collections							
	<b>√</b>	Networking							
	<b>~</b>	Serialization							
		✓ NSCoding							
		✓ Codable							
		✓ JSON							
		✓ XML							
		✓ Protobuf							
$\checkmark$	Use	erNotifications							
$\checkmark$	Cor	re Location							

Core Motion

	$\checkmark$	Wor	k i	n background mode
$\checkmark$	Sof	twar	e A	rchitecture
	$\checkmark$	Des	ign	Patterns
		$\checkmark$	Cod	coa
			$\checkmark$	Abstract Factory
				Class cluster
			<b>/</b>	Adapter
			$\checkmark$	Command Pattern
			$\checkmark$	Chain of Responsibility
			$\checkmark$	Decorator
				Delegation
				Categories
			$\checkmark$	Facade
			$\checkmark$	Memento
			$\checkmark$	Observer
			<b>/</b>	Proxy
			$\checkmark$	Receptionist
			$\checkmark$	Singleton
			<b>/</b>	Template Method
			$\checkmark$	MVC
		$\checkmark$	Arc	chitectural
			<b>/</b>	MVC
			$\checkmark$	MVVM / UIKitPlus
			$\checkmark$	MVP
			$\checkmark$	Clean architecture
				✓ VIPER
				✓ RIBs
			<b>/</b>	Coordinators
		$\checkmark$	Cre	eational
			<b>/</b>	Factory
			<b>/</b>	Abstract Factory
			<b>/</b>	Builder

Factory Method

			$\checkmark$	Object Pool
			$\checkmark$	Prototype
			$\checkmark$	Singleton
		$\checkmark$	Str	ructural
			$\checkmark$	Adapter
			$\checkmark$	Bridge
			$\checkmark$	Composite
			$\checkmark$	Decorator
			$\checkmark$	Facade
			$\checkmark$	Flyweight
			$\checkmark$	Proxy
		$\checkmark$	Beł	navioural
			$\checkmark$	Command
			$\checkmark$	Chain of responsibility
			$\checkmark$	Interpreter
			$\checkmark$	Iterator
			$\checkmark$	Mediator
			$\checkmark$	Memento
			$\checkmark$	Observer
			$\checkmark$	State
			$\checkmark$	Strategy
			$\checkmark$	Visitor
		$\checkmark$	Con	currency
			$\checkmark$	Anti-pattern
	$\checkmark$	Des	ign	Principles
		$\checkmark$	SOL	LID .
		$\checkmark$	Inv	version of Control
			$\checkmark$	Dependency Injection
			$\checkmark$	Service Locator
		$\checkmark$	Prot	tocol-Oriented Programming
$\checkmark$	Dep	ende	nci	es management
	$\checkmark$	Coc	oapo	ods
	$\checkmark$	Cart	hag	e

	$\checkmark$	Swift Package Manager					
<b>√</b>	Pro	roject structure and File/Group organisation					
<b>√</b>	Ve	rsion Control Systems					
	$\checkmark$	Git					
<b>V</b>	Dek	ougging					
	<b>/</b>	Instruments					
	$\checkmark$	Best practices					
		Checklists					
<b>√</b>	UX						
<b>V</b>	Ca	ching and Persistency					
	<b>/</b>	Core Data					
	$\checkmark$	Realm					
<b>V</b>	Te	sting					
	$\checkmark$	Unit Tests					
	<b>\</b>	Snapshot Tests					
		Functional test					
	$\checkmark$	UI Tests					
	$\checkmark$	TDD					
	<b>/</b>	BDD					
<b>√</b>	Performance optimization						
	<b>\</b>	Increase FPS					
		Decrease memory footprint					
$\checkmark$		code signing					
$\checkmark$	Too						
	$\checkmark$	IDE					
		✓ Xcode					
		✓ Interface Builder					
		Swiftlint					
		Sourcery					
		Fastlane					
		Charles					
<b>V</b>	Cor	ntinuous Integration					

Github Actions / Jenkins

	✓ Xcode server					
$\checkmark$	Security					
	✓ Keychain					
$\checkmark$	tvOS					
	✓ Focus interactions					
$\checkmark$	WatchKit					
$\checkmark$	Programming Paradigms					
	✓ Object-Oriented					
	Functional					
	✓ Functional Reactive Programming Frameworks					
	▼ React Native					
	<ul><li>RxRealm, RxDataSources</li></ul>					
	Combine					

### **Computer Science**

```
✓ Computer Science knowledge
   ✓ Algorithms cert
       ✓ Sorting cert
       ✓ Graph Theory cert
          ✓ Trees cert
       ✓ Strings cert
       ✓ Greedy cert
       ✓ Dynamic Programming cert
       ✓ Bit Manipulation cert
       ✓ Recursion cert
       ✓ Game Theory cert
       ✓ NP Complete cert

✓ Big-O notation cert

   ✓ Abstract Data Types cert

✓ Stack cert

       ✓ Array cert
       ✓ List cert
       ✓ Map cert
       ✓ Multimap cert
       ✓ Set cert
       ✓ Multiset (Bag) cert
       ✓ Graph cert
          ✓ Tree cert
       ✓ Queue cert
       Priority Queue cert
       ✓ Double-ended priority queue cert
       ✓ Double-ended queue cert
   ✓ System design
       Design large-scale systems / Amazon, Dropbox, Instagram,
          Facebook, Netflix, Pinterest, Twitter, Uber, Youtube
```

## **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).
- Y 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.

## **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).
- UlKit, 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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