

# Surviving the Technical Interview Roadmap



## Assess Your Technical Knowledge

2 = You could whiteboard it without a reference and/or teach it to someone else (Depth)

1 = You can have a solid discussion about it and can identify it in code (Breadth)

0 = Very little knowledge or practical experience

### Data Structures

- \_\_\_ Linked lists
- \_\_\_ Binary trees
- \_\_\_ Trees/Hierarchies
- \_\_\_ Stacks
- \_\_\_ Queues
- \_\_\_ Vectors/Arrays
- \_\_\_ Hash tables

### Design

- \_\_\_ Design Patterns
- \_\_\_ System Design
- \_\_\_ Sequence Diagrams

### Database

- \_\_\_ DDL
- \_\_\_ DML/SQL

### Scalability

- \_\_\_ Load balancing
- \_\_\_ Caching

### Algorithms

- \_\_\_ Simple Search
- \_\_\_ Binary Search
- \_\_\_ Breadth First Search
- \_\_\_ Depth First Search
- \_\_\_ Sorting
- \_\_\_ Quick Sort
- \_\_\_ Merge sort
- \_\_\_ K-nearest neighbors
- \_\_\_ Dynamic Programming
- \_\_\_ Recursion

### OO Concepts

- \_\_\_ Polymorphism
- \_\_\_ Encapsulation
- \_\_\_ Inheritance
- \_\_\_ Abstraction
- \_\_\_ Singleton, Factory, etc
- \_\_\_ SOLID principles
- \_\_\_ Interfaces

### Performance

- \_\_\_ Memory Management (Stack vs Heap)
- \_\_\_ Run Times/Big O Notation
- \_\_\_ Refactoring

### Misc

- \_\_\_ Debugging
- \_\_\_ Test Driven Development
- \_\_\_ Version Control Systems
- \_\_\_ Agile/Waterfall/etc
- \_\_\_ Bit manipulation
- \_\_\_ Primitives
- \_\_\_ Compilers
- \_\_\_ Client/Server
- \_\_\_ Hardware/Software
- \_\_\_ Networking
- \_\_\_ Operating Systems
- \_\_\_ Key Methods in Libraries
- \_\_\_ Frameworks/IDEs
- \_\_\_ APIs

## Interview Prep Sheet **Your Experience**

Project Showcase	<input type="checkbox"/> Website _____ <input type="checkbox"/> Github _____ <input type="checkbox"/> Blog _____ <input type="checkbox"/> Project _____ <input type="checkbox"/> Project _____ <input type="checkbox"/> Project _____ <input type="checkbox"/> Project _____	
Internships/Consulting		
Hackathons/Coding Competitions		
Open Source Contributions		
Organizations		
<p>Speaking points with respect to your projects (Tell me about a time when...)</p> <ul style="list-style-type: none"><li><input type="checkbox"/> You solved a problem:</li><li><input type="checkbox"/> You fell short of a deadline or failed:</li><li><input type="checkbox"/> Describe a decision that you made that wasn't popular and how you overcame it:</li><li><input type="checkbox"/> You disagreed with the outcome of a decision:</li><li><input type="checkbox"/> You didn't know what you were doing but had to do it anyway:</li><li><input type="checkbox"/> You made a mistake:</li><li><input type="checkbox"/> You were pressured for results that you couldn't achieve:</li></ul>		
Company Information <input type="checkbox"/> Size, Locations, Culture...	Job Description (how does your experience line up?)	Your Interviewers: (make notes from their Linked In profiles)