

# CURRICULUM BROCHURE



Upskill & Ace in  
Your Tech Career

[www.1stop.ai/jobs](http://www.1stop.ai/jobs)

## About 1Stop

1Stop is a results-driven upskilling platform designed for undergraduate and postgraduate candidates eager to break into the tech world. With our industry-approved teaching approach, we empower learners to upgrade their skills and seamlessly transition into their dream tech roles.

What sets us apart? Our learners are mentored by experienced engineers from top product companies like Google, Microsoft, Amazon, Arcesium, and more –giving them unparalleled guidance and insights.

### Our Impact

- 120% Industry-Leading Salary Hike
- 6.25X ROI (Return on Investment)

## About 1Stop Software Development Program (Transformer)

1Stop Transformer is an industry-recognized program designed especially for working professionals that focuses on:

1. Building the RIGHT SKILLS required to crack top product companies.
2. Bringing CONSISTENCY in your upskilling journey.
3. Providing CLEAR DIRECTION & SUPPORT towards your goal.

Within our program, you will learn from live classes hosted by instructors working in top product companies.

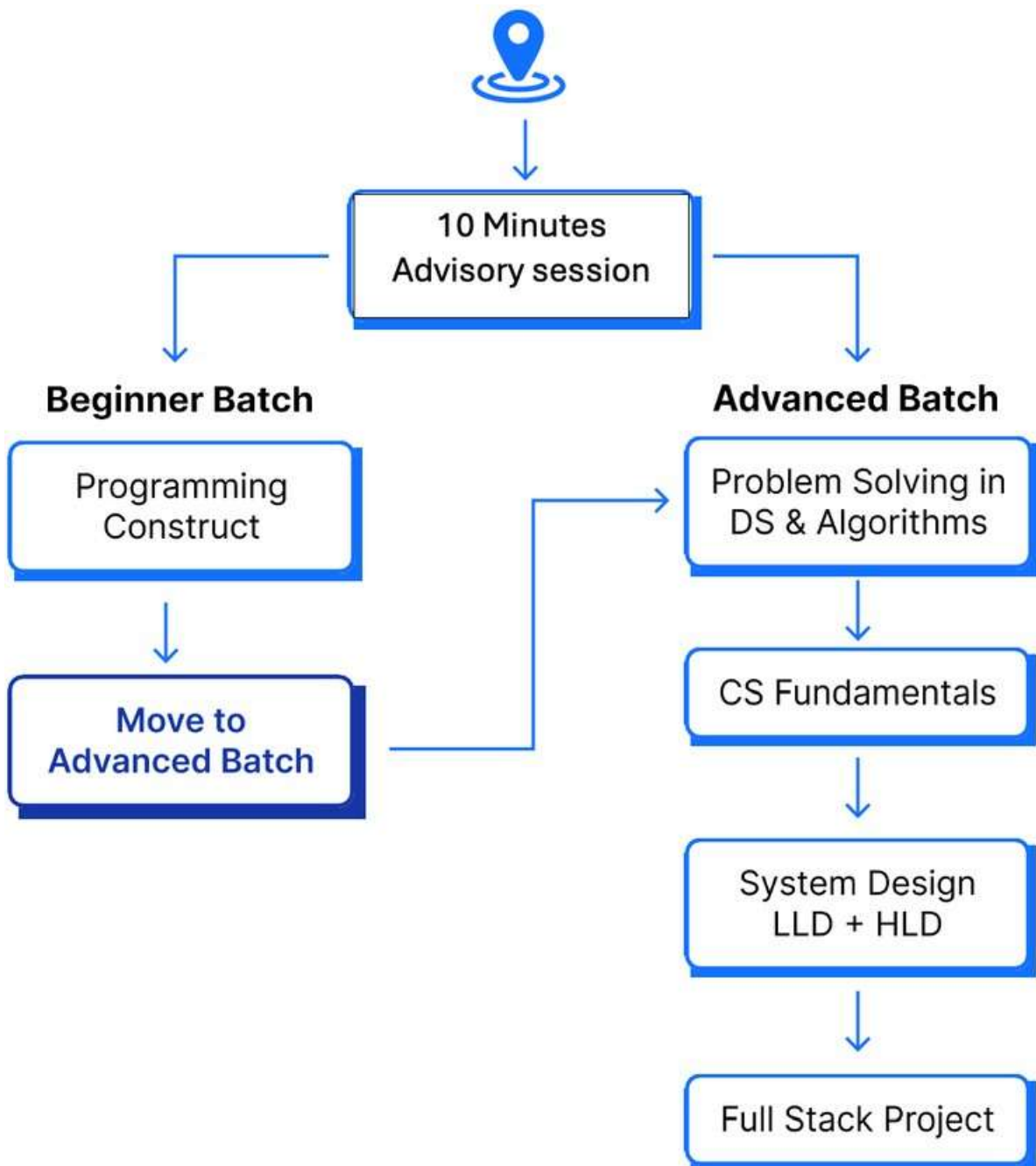


## Curriculum Deep-Dive

For any learner, there are 2 learning paths.

Your learning path depends on your proficiency; it's that simple.

An initial 10-minute Advisory(counsellor) session to determine which learning path the student will enter.



Let's Explore all the Modules In detail, one by One

## Module – 0

# Programming Constructs

Duration: 4 Weeks

For Beginner, it is first important to build command over programming constructs.

Within this module, our goal is to help you be confident with coding fundamentals.

- Introduction to Programming
- Input Output and Data Types
- Operators
- Conditional Statements
- Loops
- Pattern Problems
- Functions
- 1D Array
- Number System & Maths
- String Implementation
- Introduction to Data Structures
- Time & Space Complexity

## Outcome

After this module, you will be confident in:

- Coding in 1 programming language
- Fundamental understanding of Data Structure & Time Complexity

## USPs of our Delivery



- All topics taught in live classes with instant doubt support to accelerate learning.
- Assignment (post lecture) & their evaluation
- Hyper-Personalized: Special focus on individual with a constant touch from Student Success Manager & Mentor.



### Rohal Kurup

Software Specialist, Dassault Systems  
Experience | Fresher



I tried to upskill from free online resources but couldn't be consistent, then I joined 1Stop Academy. Excellent curriculum and my mentor helped me move in right direction.



## Module – 1

# Problem Solving in DS & Algo

Duration: 15 Weeks

Problem solving in DS and Algo is one of the most important topic to master for a software engineer. That is why, we spend the first 15 weeks of our program ensuring you build a solid command over problem solving skill.

### Linear DSA

- 1D & 2D Array
- Strings
- Number System & Maths
- Bit Manipulation
- Binary Search
- 2 Pointers
- Recursion
- Hashing
- Sorting
- Link List
- Stacks & Queues

### Non - Linear DSA

- Trees
- Binary Trees & Binary Search Trees
- Heaps
- Greedy Algorithms
- Dynamic Programming
- Graphs

## Advanced DSA

- Tries
- Segment Tree
- String Pattern Matching
- Advanced DP & Graph Problems

## Outcome

After this 15-week module, you will:

- Feel confident in your problem-solving skills
- Develop pattern recognition skills required to crack hard level DSA problems
- Be interview ready with DSA to crack top tech companies.

## USPs of our Delivery

- Hyper-personalization: Depending on student specific learning pace, multiple revision classes are organized.
- Assignment (post lecture) & their immediate evaluation help to compare your performance against peers.
- Focus is not just on solving & remembering questions but to help students build intuition behind concepts, enabling them to identify patterns easily.
- Special focus on difficult topics like Dynamic programming and Graphs.
- Weekly contest & regular Mock interviews to understand your conceptual understanding and give feedback.



## Module – 2

### CS Fundamentals

Duration: 2 Weeks

Our code run on hardware devices. So, in order to design & implement our high-level solutions on machines that understand low level in an optimal & reliable way, we should have understanding around core CS topics.

- Databases
- Computer Networks
- Operating Systems

### Outcome

Gain fundamental understanding of crucial CS topics like Concurrency, threading, SQL vs No SQL, Normalization, Networks.

### USPs of our Delivery

- Live lectures from industry experts sharing the practical application of CS fundamental topic in software development lifecycle.
- Assignment (post lectures) & their evaluation



## Module – 3

### System Design - LLD + HLD

Duration: 9 Weeks

As a software developer, we are responsible for:

- Writing a clean, maintainable, modular code that is easy to understand & extend.
- Designing services capable of scaling to millions of active customers with high reliability & fast access.

Within this module, we learn these 2 skillsets with hands on experience & multiple case studies

#### Low Level Design (LLD)

- Object Oriented Programming
- SOLID Principles
- Design Patterns
- UML Diagram
- Schema Design
- API Design
- Case Studies – Matching Coding Interviews

#### High Level Design (HLD)

- Architecture Design
- Distributed System
- Domain Name System (DNS)
- Load Balancing
- Consistent Hashing
- CAP Theorem

- Caching
- Content Delivery Network (CDNs)
- Transactions
- SQL vs NoSQL
- Scalability
- ZooKeeper + Kafka (Distributed Messaging Queue)
- Microservices
- Security
- Case Studies

## Outcome

After these 9 weeks, you will be able to design system capable of scaling to billions of users and participate in design discussion confidently.

## USPs of our Delivery

- Multiple discussion with expert (e.g. senior engineers at top tech companies)
- Hands on learning experience
- Solve multiple real life case studies in live classes & understand the tradeoffs of designing a system.
- Understand the internals of complex systems like distributed
- Queues, Distributed file system, Microservices, etc.



### **Yash Kadtan**

Software Engineer, Arcesium  
Experience | Fresher



Well-structured plan and insightful live sessions led by top professionals helped me enhance my interview preparation significantly.

## Module – 4

# Full Stack Specialization with Project

Duration: 8 Weeks

As a software engineer, we build products which can scale. In this module, you will gain hands on experience of building a project from scratch & implement the LLD + HLD perspective in real projects.

- HTML, CSS, JavaScript
- JS for Web Development (DOM Manipulation, Events)
- React
- Redux
- Git
- NodeJS
- Backend Architecture
- MVC Framework
- API Design
- Creating modules, data access layers, controller, views
- Creating microservices
- Spring Boot
- Deployment on AWS, Security



## Hands-On Projects You Will Be Building:

### Netflix-Like Streaming Platform - Frontend

1

*(HTML, CSS, Javascript, React, REST Api)*

- Learn web development fundamentals, including HTML for structure and CSS for styling.
- Use JavaScript to add dynamic interactivity to the UI.
- Utilize React to build scalable and maintainable user interface components.
- Manage application state and props, and handle user events in React.
- Conduct API requests to fetch data dynamically, mirroring real-world streaming services.

### Amazon-Like Ecommerce Platform - Backend Using Node.Js

2

*(Node.js, MongoDB, REST Api)*

- Develop a Node.js-powered backend for an Amazon-like application.
- Implement MongoDB for database operations and data storage.
- Design and utilize RESTful APIs for server-client communication.
- Integrate authentication and authorization for secure user access.
- Handle CRUD operations and data validation effectively.
- Establish efficient server-side logic for a seamless user experience.

## Zomato-Like Food Ordering App - Backend Using SpringBoot

3

*(SpringBoot, MVC, REST Api)*

- Construct a scalable backend for a Zomato-like app using Spring Boot.
- Apply the MVC framework to organize code and enhance maintainability.
- Design RESTful APIs for robust server-client interaction.
- Utilize MongoDB for efficient data storage and retrieval.
- Ensure seamless handling of CRUD operations for restaurant listings and reviews.

### Outcome

After these 5 weeks, you will have hands on experience of designing and coding scalable products.

You will be a great software developer.

### USPs of our Delivery

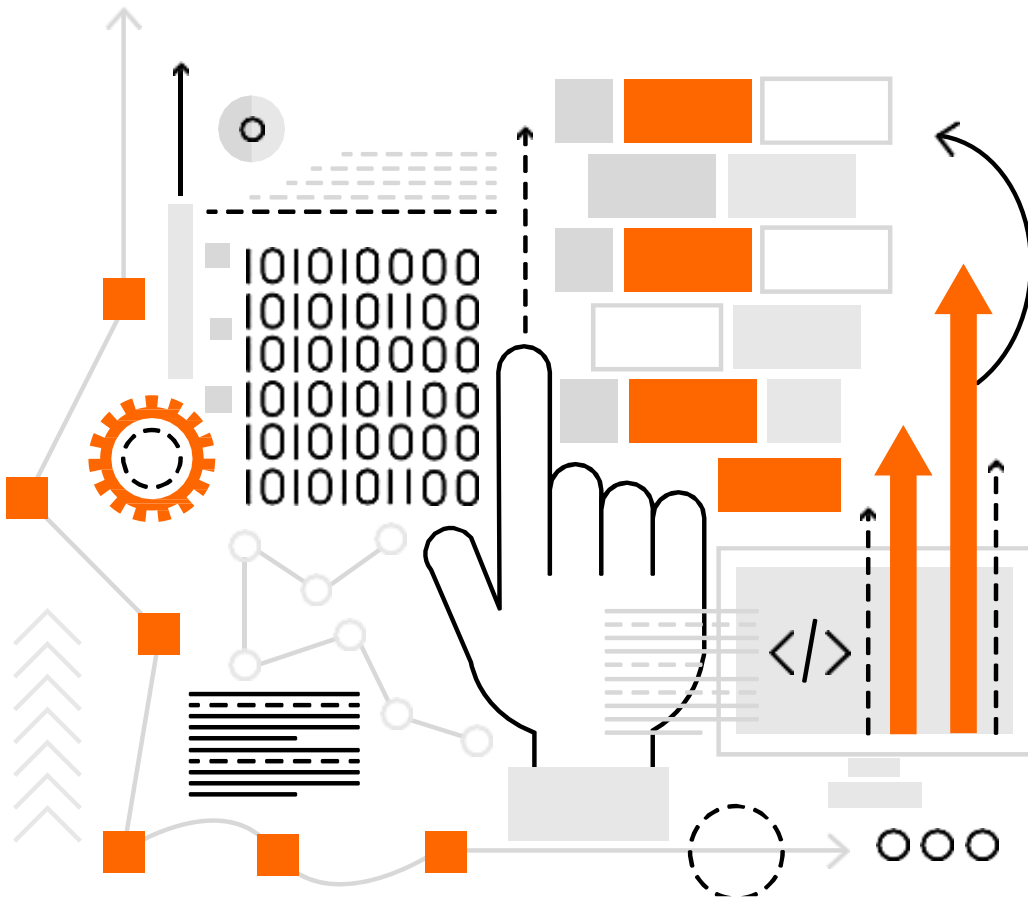
- Real-world applications provide learners with hands-on real-world experience.
- Gain hands-on experience on LLD & HLD
- Discussion with your mentor regarding project improvements.



**Vishal Srivastava**  
Software Developer, Barclays  
Experience | Fresher



Doing self-prep, I couldn't even pass online assessments of Top companies. But the change 1Stop brought into my preparation is phenomenal.



# Get Placed at Top Tech Companies

This process is usually in 3 Modules:

Build a strong profile



Get Diverse Opportunities



Crack Interviews

We focus on all the above 3 objects in this Module.

## Final Result



You getting placed at one of the top tech companies like Google, Microsoft, Amazon, Apple & sharing us a personal review of your journey with us.

## Placement Plus

### Build Strong Profile:

- Resume building guidelines designed for SDE roles + resume reviews.
- Profile building sessions on LinkedIn, Naukri, indeed, and other hiring platforms.
- Handling objections.

### Get Diverse Opportunities:

- Tie-ups with 200+ corporate partner companies.
- Collaborations with consultancies hiring for top tech companies.
- Referrals from alumni & mentors' community.
- Sessions on how to effectively apply yourself to get more opportunities.

### Crack Interviews:

- On-demand mock interviews with mentors before a specific interview.
- Do's & Don'ts of interviews.
- Handling behavioral questions.
- Sessions on effective salary negotiation.

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## 1Stop Benefits

Our USP is the trust top professionals have in us. And with a salary hike of 120.34% – it's a thumbs up for our learners as well.

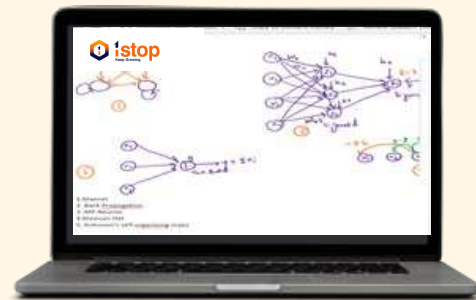
### Personalized Learning

We believe in personalized learning experiences, and your personal success manager will ensure the same.



## Live Classes

All the classes inside the course will be taught live by instructors having experience working at top tech companies. Our optimal batch size ensures you get your doubts cleared in real time inside the classes.



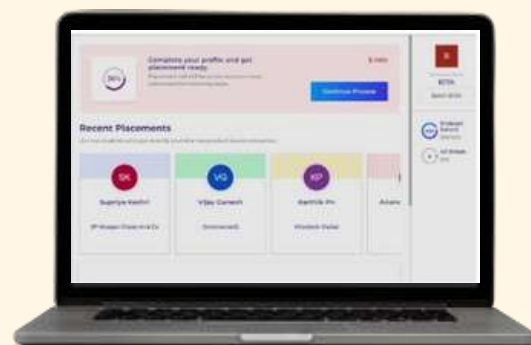
## Regular assignments

Regular assignments after every lecture will ensure you remain consistent and if you get stuck in a problem – 24×7 doubt support is just a click away.



## Recruitment Team

Once you upskill to ace an interview, our Recruitment team works with you to provide diverse opportunities. Our recruitment team provides 360 deg profile optimization, resume building, referrals, direct opportunities, salary negotiation, etc.



## Program Outcome

**290**

Learners Placed

**6.25x**

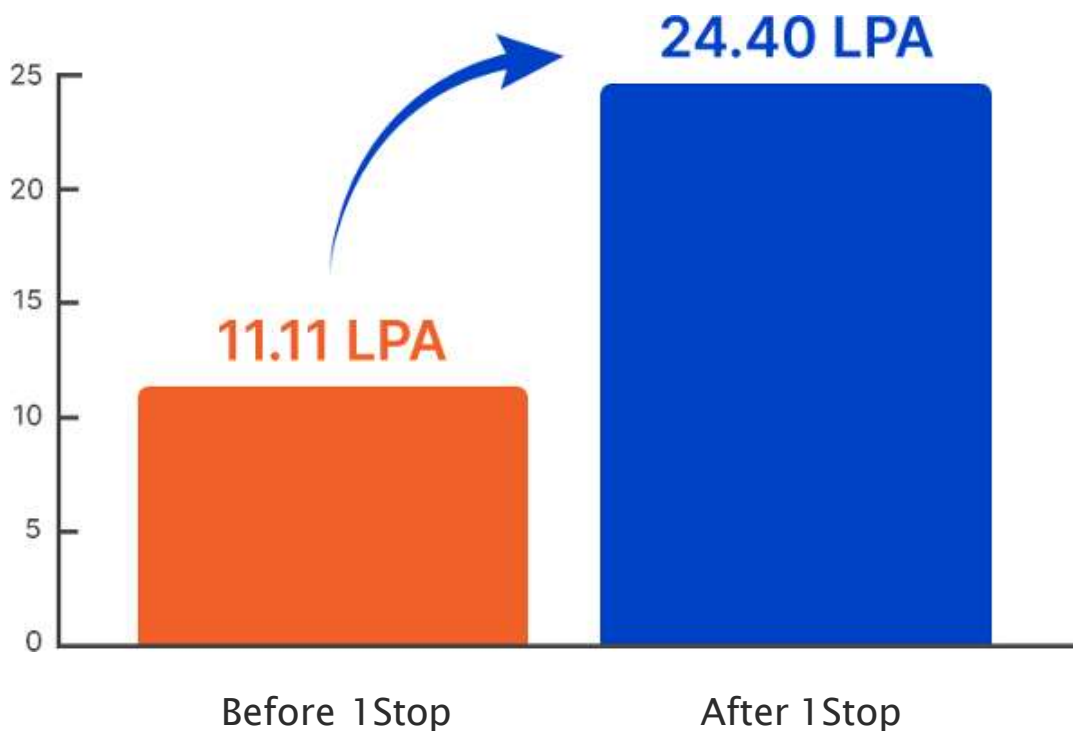
Return on Investment

**30 LPA**

Highest Package

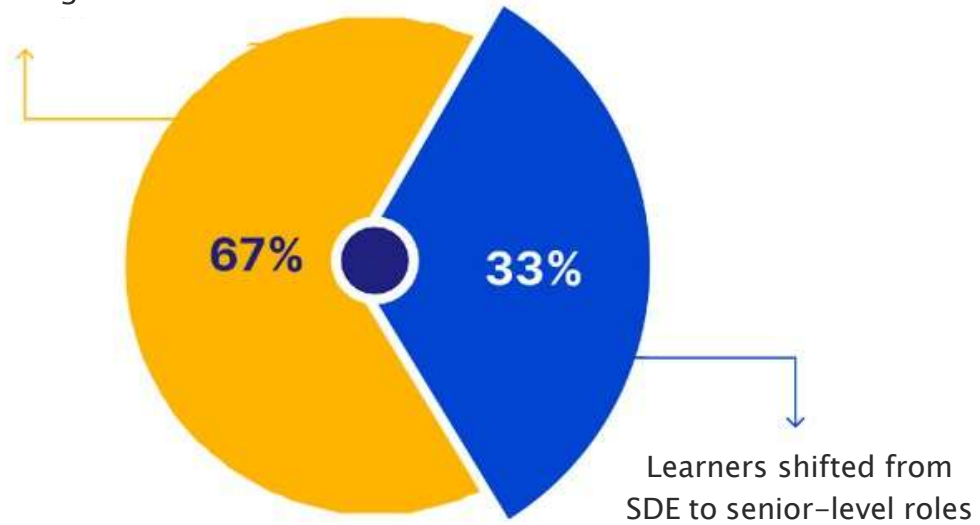
**120%**

Salary Hike



# 1Stop Learners Transition

Learners shifted to a product-based company with a significant hike



## 1Stop Alumni's Through



### **Pulkit Pradeep**

Software Engineer, Clever tap  
Experience | Fresher



I began my upskilling journey with 1Stop and wasn't disappointed. I liked the personal touch in Live classes and Mentor sessions. Recommend for upskilling for technical interviews.



### **Rohal Kurup**

Software Specialist, Dassault Systems  
Experience | Fresher



I tried to upskill from free online resources but couldn't be consistent, then I joined 1Stop Academy. Excellent curriculum and my mentor helped me move in right direction.



## **Akhil Reddy**

Software Development Engineer, Recro  
Experience | Fresher



I lacked understanding in DSA and System design and couldn't crack top tech companies. 1Stop structured curriculum and mentor support helped me upskill and crack Recro.



## **Yash Kadtan**

Software Engineer, Arcesium  
Experience | Fresher



Well-structured plan and insightful live sessions led by top professionals helped me enhance my interview preparation significantly.



**Vishal Srivastava**  
Software Developer, Barclays  
Experience | Fresher



Doing self-prep, I couldn't even pass online assessments of Top companies. But the change 1Stop brought into my preparation is phenomenal.



## Meet your Instructor & Mentors

### Learn from Industry Veterans

Our instructors and mentors are highly rated by working professionals upskilling with us.

They are working at top product companies & have experience working on industry scale Software Development projects.

They are also familiar with the best ways to crack these companies.



#### **JACOB DENNIS P**

Infini Systems Pvt Ltd (Web Application)

I am a Skilled Full stack Developer with 6 + years of experience in the Full SDLC creating dynamic web applications. Updates functionality based on customer requirements to ensure excellent user experience

More about me, I love Teaching with having coached over 3000+ aspiring students over the years and working on Computers. A Tinkerer, Hands on DiY Guy and a Hoboyist.

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#### **Lekshmana Perumal Murugan**

SDE at PayPal | Experience: 11 years



Meet Lekshmana Perumal Murugan, an esteemed Software Developer from PayPal with an impressive 11-year tenure. Specializing in Payments and E-Commerce, Lekshmana is not only a seasoned professional but also a passionate contributor to open-source projects, dedicated to fostering social change.



## Vikas Sharma

SDE at Microsoft | Experience: 8 years

Meet Vikas Sharma, a distinguished alum of NIT Allahabad with a degree in Computer Science and Engineering. Vikas boasts over 9 years of extensive industry experience.

Vikas has successfully built platforms leveraging cutting-edge technologies such as Azure, AWS, NET, Spring, C#, Java, CI-CD, SQL, Queue, SAP, and Multi-threading.



**Upskill Now and Shift to  
Top Product-Based  
Companies**

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