



4th Year Comeback Blueprint

For students who feel like they "wasted" 3 years; final push for placements, hackathons, open source, and internships

Your Mission

In the next 6–7 months, you can build:

- **DSA Mastery:** 400+ problems with company-specific focus
- **Core CS Expertise:** Deep understanding with practical projects
- **Flagship Development Project:** Full-stack with modern features
- **Open Source Contributions:** Meaningful PRs to established repos
- **Placement Success:** Multiple interview calls and offers

Remember: This is your final sprint—everything you do now directly impacts your career trajectory.

1. Context & Mindset

Placements are now imminent—companies will interview until March/April '26.

If you haven't built anything yet, you're behind. But there's still time to:

- Max out DSA (400+ problems, mock interviews daily)
- Master core subjects (OS, DBMS, Compiler, CN) deeper
- Win hackathons + show open source proof
- Secure an internship/final year project
- Finalize one (or more) "big" React/Next.js project

Final Note: This year is "go-big or go-home." Everything from 2nd + 3rd years remains; treat those as "baseline requirements."

2. Skill Stack Breakdown

A. DSA (Placement 400+ Problems + Mocks)

Goal:

- Total solved by year-end: 400+ (cumulative)



- Master company-tag problems (Amazon, Goldman, Microsoft, Flipkart)
- Daily timed mock → improve speed to 1 problem/20 mins average

Primary Resources:

- **LeetCode Premium:** Company-specific problem sets
- **Striver's A2Z DSA Course:** Advanced topics and patterns
- **InterviewBit:** Mock interviews and company prep
- **Pramp + Interviewing.io:** 2–3 mocks/week with peers

Weekly Routine (12 weeks from Sept '25 – Dec '25):

Weeks 1–3: Finish all Graph + DP leftovers; 50 advanced problems (trees, heaps, greedy)
Weeks 4–6: 50 company-tag problems (Flipkart, Amazon, Microsoft)
Weeks 7–9: Complete 50 "blind 75" medium/hard problems
Weeks 10–12: 10+ full-length timed mocks (2 hrs each)

Progress Tracking:

Maintain a comprehensive DSA tracker with columns:

Topic	Platform	Problems Attempted	Problems Solved	Difficulty
Arrays	LeetCode	25	23	Easy/Med
Amazon Tags	InterviewBit	30	28	Med/Hard
...	...	...	...	...

B. Core CS Subjects (Deep Revision + Application)

Why? Dream companies ask 1–2 OS/DBMS questions in interviews.

Key Topics to Cover (2 weeks each):

1. Operating Systems:

- Build a CPU scheduling visualizer in React
- Write blog: "How Round Robin Scheduling Works" with diagrams
- Deep dive: Process synchronization, deadlocks, memory management

2. Database Management Systems:

- Build mini project: Node + MySQL/PostgreSQL library management
- Master complex SQL: joins, aggregation, indexing, normalization
- Understand ACID properties, transaction management

3. Computer Networks:

- Set up mini chat server in Node (websocket implementation)
- Explain TCP handshake, HTTP/HTTPS, DNS resolution
- Understand network security, protocols, OSI model

4. Compiler Design:

- Use compiler explorer to analyze C code compilation
- Write 500-word summary on lexical analysis and parsing
- Understand compilation phases, optimization techniques

Study Plan (10 weeks):

Week 1–2: OS deep dive (1 blog + 1 mini simulation)
Week 3–4: DBMS project + complex SQL queries
Week 5–6: CN hands-on (chat server) + protocol concepts
Week 7–8: Compiler write-up + revision of tough topics
Week 9–10: Integration + 20 placement-style theoretical questions

C. Dev (Final "Big" Project + Open Source)

Flagship React/Next.js Project Requirements:

What to Build? Choose aligned with interests (health-tech, fintech, edtech)

Core Technical Features:

- **Authentication:** JWT/NextAuth with role-based access
- **Database:** PostgreSQL/MongoDB with proper schema design
- **API Integration:** Payment gateway (Stripe/Razorpay)
- **Real-time:** Chat/notifications using WebSockets
- **Performance:** Caching, lazy loading, optimization
- **Testing:** Unit tests, integration tests

Deployment & Documentation:

- Deploy on Vercel/Railway with custom domain
- Comprehensive README with architecture diagrams
- 3-slide pitch deck for interviews
- Performance metrics and user analytics

Open Source (High-Leverage Contributions):

Target Repositories:

- Next.js Examples repo (add new example folder)
- React Router documentation improvements
- Popular utility libraries (date-fns, lodash alternatives)
- Developer tools (VS Code extensions, CLI tools)

Contribution Strategy:

- Start with documentation fixes and examples
- Progress to bug fixes and small features
- Document learning process on LinkedIn
- Build relationships with maintainers

Portfolio Website Enhancement:

- **Home:** Professional hero section with clear value proposition
- **Projects:** Live demos, GitHub links, technical deep-dives
- **Blog:** Technical articles, project breakdowns, learning journey
- **About:** Professional story, skills, achievements
- **Contact:** Multiple channels, availability for opportunities

D. Hackathons & Competitive Wins

Target Events (July – Dec '25):

- Major college hackathons (IIT, NIT, VIT)
- Corporate hackathons (Google, Microsoft, Amazon)
- Devfolio and Unstop featured events
- International online hackathons

Team Strategy:

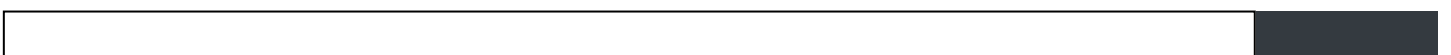
- 2 experienced developers + 1 UI/UX designer + 1 business/domain expert
- Pre-hackathon preparation: problem brainstorming, tech stack decision
- Role assignment: frontend, backend, design, presentation

Execution Framework:

Before Hackathon:

- Research problem domains you're passionate about
- Prepare boilerplate code and development environment
- Create wireframes and user journey maps
- Set up deployment pipeline and tools

During Hackathon:



- Build MVP with core functionality first
- Focus on user experience and visual polish
- Prepare compelling demo and pitch presentation
- Document technical decisions and challenges

After Hackathon:

- Write detailed LinkedIn article about the experience
- Open source the project with proper documentation
- Apply for follow-up opportunities (incubators, prizes)
- Network with judges, mentors, and fellow participants

E. Internship & Placement Blitz

Application Strategy (Dec '25 – Feb '26):

Target Companies:

- **Tier-1:** FAANG, unicorn startups, top consulting firms
- **Tier-2:** Established product companies, growing startups
- **Tier-3:** Service companies, smaller startups, backup options

Application Channels:

- Campus placement portal (maximize submissions)
- LinkedIn networking and direct applications
- Referrals from alumni and industry connections
- Job boards: Naukri, Internshala, AngelList, Wellfound

Referral Strategy:

LinkedIn Outreach Template:

"Hi [Name], I'm a final year BTech student specializing in React and system design. I've built [specific project] and contributed to [open source project]. I noticed you work at [Company] and would appreciate any guidance on [specific role]. My portfolio: [link]. Thank you!"

Interview Preparation:

- **Technical Rounds:** Daily DSA practice, system design basics
- **Behavioral Rounds:** STAR method, project deep-dives
- **Mock Interviews:** 3-4 sessions per week with peers/mentors
- **Company Research:** Values, products, recent news, culture

Application Tracking System:

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Company	Role	Applied On	Referral	Status	Next Action
Flipkart	SDE Intern	20 Dec 2025	Yes (Alumni)	Interview Scheduled	Prepare system design
Startup XYZ	Frontend Dev	2 Jan 2026	No	Application Sent	Follow up in 1 week

3. Checklist & Timeline (Sept '25 – March '26)

Month	Focus Categories	Deliverable / Goal
Sept – Oct	DSA: 100 company-tag problems + daily mocks	150 new problems solved + 20 timed mocks completed
Nov	Core CS projects + technical blogs	2 mini-projects (OS, DBMS) + 2 detailed blog posts
Dec	Major hackathons + flagship project start	2 hackathon participations + project foundation laid
Jan	Complete flagship project + deployment	Live full-stack app + custom domain + documentation
Feb	Placement applications + open source contributions	50+ applications + 10+ referrals + 2 meaningful PRs
Mar	Interview preparation + final polish	20+ mock interviews + portfolio optimization

4. Resource Links

DSA Resources:

- [LeetCode Premium / Blind 75](#)
- [InterviewBit Mock Practice](#)
- [Pramp Mock Interviews](#)
- [Striver's A2Z DSA Course](#)

Development Resources:

- [Next.js Official Documentation](#)
- [React Official Documentation](#)
- [Vercel Deployment Platform](#)

Hackathons & Opportunities:

- [Devfolio Hackathon Listings](#)
- [Unstop Hackathon Competitions](#)

Job Platforms:

- [Naukri Job Portal](#)
- [Internshala Internship Platform](#)
- [AngelList Startup Jobs](#)

Learning Platforms:

[Striver's YouTube Channel](#)

[Harkirat Singh's Channel](#)

✓ Summary

DSA Mastery

400+ problems with company focus + daily mocks

Core CS Excellence

Deep projects & blogs showing applied understanding

Flagship Development

Full-stack app with auth, payments, real-time features

Open Source Impact

2+ meaningful PRs documented publicly

Hackathon Success

2+ major wins with shipped MVPs and pitches

Placement Victory

50+ applications, 10+ referrals, multiple offers

Final Words

This is your final sprint before entering the professional world. Every hour you invest now will compound into career opportunities and higher starting packages. The difference between average and exceptional outcomes lies in consistent execution of this roadmap.

Key Success Factors:

- **Consistency over intensity:** Daily progress beats weekend sprints
- **Quality over quantity:** Deep understanding trumps surface-level coverage
- **Network actively:** Relationships open doors that applications cannot
- **Document everything:** Your journey becomes your personal brand
- **Stay adaptable:** Market conditions change, but fundamentals remain

Remember: You're not just preparing for placements—you're building the foundation for a successful tech career. Start today, stay consistent, and make every month count!