



roadmap

Certainly, Sunny! Here is a comprehensive monthly roadmap tailored to your goals, aspirations, skills, and target to study at IIT, while also considering your interest in studying abroad in the future. This roadmap will help you navigate your academic journey effectively, incorporating extracurricular activities, competitions, and preparations aligned with your long-term objectives as a software engineer.

Sunny's Roadmap

Overall Timeline: August 2024 - August 2026

August 2024 (Current Month)

- Internship Search: Familiarize yourself with LinkedIn and Internshala; look for internships related to coding or software development.
- Extracurriculars:
 - Join or start a coding club at school to gain leadership experience.
 - Research nearby NGOs to volunteer in addition to your current activities. Consider helping with their digital presence.
- Preparation:
 - Continue working on your foundational skills in HTML. Consider online platforms like Codecademy or freeCodeCamp to learn more about web development and coding.
- Events/Tournaments:
 - Research and register for upcoming hackathons on [Devpost](<https://devpost.com/hackathons>).

September 2024

- Academic Focus:
 - Review and enhance your mathematics and science skills. Use online resources like Khan Academy for practice.
- Competitions:
 - Participate in the CoderZ League competition. Registration is open until the end of

September. Details can be found [here](<https://competition.gocoderz.com/>).

- Volunteer Work:

- Continue your volunteer work with Needy Binders and secure a role in the digital marketing aspect to boost your skills.

- Skill Development:

- Take an online course in problem-solving or coding methodologies (like Python).

- Networking:

- Attend local tech meetups or workshops; connect with people in the software engineering field.

October 2024

- Preparation for Entrance Exam:

- Start intensive preparations for the IIT entrance exam (JEE). Use study materials, take mock tests, and possibly join a coaching class. Set a schedule for daily study, emphasizing areas of math and science.

- Competitions:

- Register for the Breakthrough Junior Challenge. The deadline is in December. Start brainstorming project ideas based on science/math topics.

- Build a Personal Website:

- Showcase your projects and skills with a personal portfolio site. Use platforms like GitHub Pages or WordPress for this.

- Sports/Extracurricular Activities:

- Join a school sports team or engage in online fitness classes. This balances your academic life and promotes well-being.

November 2024

- School Commitments:

- Focus on your academic performance. Aim for 90% in the class 10th preliminary exams.

- Competitions:

- Participate in regional mathematics competitions. Look for opportunities through websites like Indian Talent Olympiad or similar.

- Skill Enhancement:

- Start learning C/C++ or Java, popular programming languages in software engineering. You can utilize resources like Coursera or edX.

- Planning:

- Decide on your summer program plans (research potential opportunities related to software engineering for summer 2025).

December 2024

- Exams Preparation:

- Engage in active revision for your upcoming class 10 board exams. Stay organized and create a study timetable.

- Competitions:

- Finalize your video project for the Breakthrough Junior Challenge and submit it before the deadline in December.

- Volunteering and Community Service:
 - Continue contributing to Needy Binders and look for winter volunteer opportunities (food banks, clothing donations).
- Networking:
 - Contact mentors, and reach out for potential internships or shadowing experiences in tech companies.

January 2025

- Start Planning for the IIT Entrance Exam:
 - Evaluate study guides and previous JEE papers. Begin a consistent weekly study routine.
- University Preparation:
 - Research potential summer programs abroad; focus on those that align with coding, technology, or software development.
- Extracurricular Planning:
 - Participate in competitions from the prescribed lists that interest you (e.g., Google Science Fair).
- Schooling and Academic Track:
 - Maintain focus on your core subjects to ensure maximum results in board exams. Aim for above 90% in upcoming school tests.

February 2025

- Entrance Exam Focus:
 - Register for the IIT entrance exams and plan your study calendar.
- Major Competitions:
 - Participate in regional and national coding competitions. Use websites like CodeChef and participate in their monthly contests.
- Networking/Mentorship:
 - Set up meeting times with professionals in the field, including potential inquiries for internships or job-shadowing opportunities over your school break.

March 2025

- School Board Exams:
 - Focus on pre-boards and perform exceptionally to consolidate your school year success.
- Extracurriculars:
 - Continue with your coding projects and share them on platforms like GitHub.
- Preparation for JEE:
 - Increase your weekly study hours dedicated to the IIT exam.
- Plan College Visits:
 - Arrange to visit colleges of interest either virtually or in actual visits.

April 2025

- Final School Exams:
 - Revise consistently and systematically for your class 10 board exams.
- Entering Competitions:

- Register and participate in any available science/math competitions.
- End of Year Reviews:
 - Conduct a reflection of activities undertaken so far. Identify what has been fruitful and what requires improvement. Look for clubs or opportunities for enhancement.

May 2025

- Results Announcement:
 - Board exam results are likely to be released this month. Celebrate your success and evaluate areas for growth based on performance.
- Summer Program Applications:
 - Based on interests and academic performances, proceed with applications to summer programs (both in India and abroad). Research and shortlist them.

June 2025

- Engage in a Summer Program:
 - Attend a summer program focused on coding or technology. Engage actively to network and learn more.
- Research Paper Initiation:
 - Start formulating ideas for your research paper. Reach out to mentors or teachers for guidance.
- Extracurriculars:
 - Enhance your projects related to your current coding knowledge. Possibly, create a small application or software related to a community need.

July 2025

- Program Participation:
 - Engage fully in any summer program in which you are enrolled.
- Research Progress:
 - Continue working on your research paper and plan to submit it by the end of this month.
- Skill Development:
 - Consider more advanced programming languages or frameworks to build on your interest within coding.

August 2025

- Resume Building:
 - Compile your experiences, achievements, and skills into a strong resume.
- Create a Common App Account:
 - Set up your Common App account. Begin to look at universities that align with your aspirations.
- Extracurricular Activity Reassess:
 - Reflect on your extracurriculars over the past year and highlight what has been most rewarding for you.

Long-Term Tasks Post-August 2025

- January 2026 - Application Preparation:
 - Write and refine your application essay with feedback from educators and peers. Highlight your projects and extracurricular activities meaningfully.
- February 2026 - Regular Decision Applications:
 - Submit applications to specific universities ensuring all documentations are in order, including transcripts and letters of recommendation.
- March 2026 - Interview Preparation:
 - Prepare for potential university interviews (if applicable).
- April 2026 - Finalizations:
 - Finalize university decisions based on offers received. Pay deposits.
- May 2026 - Visa Process:
 - Begin the visa application process immediately upon university acceptance. Prepare for visa interviews and paperwork.

Helpful links Based on Your Interests

- [CodeChef](<https://www.codechef.com/>): For regular coding contests and to improve your coding skills.
- [Hackathons](<https://devpost.com/hackathons>): Participate in various hackathons to experience real-life project development.
- [Khan Academy](<https://www.khanacademy.org/>): For comprehensive math and science resources.
- [Start learning programming languages](<https://www.codecademy.com/>): To deepen coding skills.
- [Dare2Compete](<https://dare2compete.com/>): Find and register for competitions relevant to your interests.

Remember, Sunny, this roadmap is a guide. Stay disciplined, adapt as necessary, and ensure you enjoy every step of your journey towards your goals. Best of luck!