

How to Software Engineer 101: comprehensive guide with templates!
Career
Hey folks,

Long time lurker and first time poster in this sub, I wanted to share my journey of being a swe and the things I had to do to reach where I am today.

This is targeted mainly to people in their 1-3 years of career and freshers/interns.

I graduated in 2023 from a tier 3 college in Bhubaneswar with 3 full time offers - 16 LPA, 22LPA and 47.5 LPA. I currently work at FAANG as an SDE1, and my work involves every tech stack, including Java, Python, TypeScript, LLMs and more.

My journey:

2019: In my first year of college, I started learning HTML and CSS out of curiosity to make silly websites. No major progress as I was just figuring out college and life in general.

2020: Covid struck, and I went home in my 2nd year. This is when my elder sister, shared with me a Udemy course (that too borrowed on her colleague's account) about building an Instagram clone using MERN stack. With nothing to do at home, I started following it and blindly pasting whatever code the instructor wrote. It just worked, but I had no idea why or how.

I spent 6 months building a silly Instagram clone with CRUD Operations using MERN Stack. I really loved seeing writing React code and it performing magical things in the UI. This really got me hooked to Frontend Web Dev.

2021: Feb of 2021, and making 4 5 simple JS projects, I thought lets test the waters, and applied at an unpaid internship. I thought the interview will be a cakewalk, and will learn on production grade stuff for free for a few months before hunting a paid internship.

Boy did I get humbled in that Interview, the interviewers asked me extremely simple HTML questions (like write HTML to render image on the left and text on the right side of a page) and I fumbled badly. The interviewers took 2.5 hours, to explain me where I was weak, what I should prepare well, and what to improve.

6 months later, I got my first internship at a small edtech company in August 2021. The stipend was 8k per month and remote. I learnt a lot there for 3 months, about deployments, good code and more.

They offered me a hike to 10k per month in my stipend and asked me to stay for 3 more months, but I rejected that offer and dedicated the next 3 months to self improvement.

In those 3 months, I made over 20 projects (good ones, implementing things like open source auth, used SQL/NoSQL/Graph DBs, used React, Vue Svelte, and much more) just to get a hang of writing good JS code, and I did all of this purely out of the interest that I had in JS. I also went over the Namaste JavaScript course by Akshay Saini (free on YouTube) over 3 times, and made sure I understand every concept clearly.

2022: Jan 2022, I received an offer from one of India's Decacorn companies as a Frontend Engineer Intern (25k per month stipend). I worked there for 7 months, before being laid off (yes as an intern lol)

July 2022, I received an offer from a growing Fintech company, 6 days within being laid off. I worked there as a Frontend Engineer Intern for 6 months, and iOS Engineer Intern for 3 months (50k per month stipend). One of the best learning and personal experiences of my life so far. This was an in office

internship and my college allowed for it since I was in 4th year at that time.

In between this internship, a FAANG company visited my college, and after 5 rounds of virtual interviews and OA, I got an offer from them (47.5 LPA | 20 base, 15 stocks, 12 joining bonus)

This company offered me the PPO for 22LPA (19 base + 3 benefits). I decided to let go since the culture wasn't that good, and my seniors were leaving the company as well.

Apr 2023: My FAANG joining got delayed by 6 months to Jan 2024, and I decided to do something about it. I received an offer from a small crypto startup as a SWE intern (60k per month stipend). I spent 3 months as an intern, got converted to a full time employee (16LPA base only) and worked there for 5 months.

2024: Jan 2024, I joined the FAANG company as an SDE 1, and the journey so far has been great.

Things you should absolutely do:

Communicate well. I can't stress enough of how important this is. Anyone will hire a good engineer who is a great communicator over an insanely good engineer who can't communicate properly. Watch English movies, give mock interviews, record yourself explaining concepts and code, do anything that breaks your English barrier and makes you a good communicator.

Make as many interesting projects as possible. No Netflix and Insta clones please, the market is flooded with them. Pick up some open source auth provider, integrate them, learn about peer to peer networks and how WebRTC works, understand why does an LLM hallucinate, etc.

Cold message and cold mail anyone and everyone possible. All of my internships were because of cold DMs over LinkedIn. Till date, I have DM'd over 1200+ people, and got response only from about 150 of them. I'll be sharing a few templates as well at the end of this post.

Apply at companies where you want to do stuff that interests you. I was always fancied my Crypto, Fintech and SAAS, and have worked at all of these domains.

Apply everywhere possible. There are over 100 unicorns in India, and I can name them all, because I have applied at all of them lol, and have interviewed at 7 of them.

Don't take rejections at heart. Everyone faces rejections, I did too (Meta London, Atlassian, LinkedIn, BharatPe, Groww, Smallcase, Bajaj Finserv, just to name a few where I couldn't crack them). Learn from your mistakes, improve over them, and don't repeat them.

Make a nice and crisp resume. I'll share a good resume link below, if you want I'll be happy to review yours as well in the DMs.

And the most important: Be the top 1% of whatever you are doing. CP? Be a Candidate Master on CF. LeetCode and DSA? Be a Guardian or above/800 questions+. Web Dev? Be an expert in JS and make more than 50 projects exploring everything. Open Source? Crack GSOC or be a maintainer for a project with more than 5k stars. ML/AI? Be a Kaggle Grandmaster. Nothing comes easy. All the above takes time. It took me 3 years to make 80+ projects (all live and deployed) and become so good at Frontend that even SDE2 level interviews were cakewalk for me. Today I work on Distributed Systems that handle billions of data points. Learning it from scratch, but again, nothing comes easy.

You need to hustle hard only for 6 months. 180 days. That's it. 180 days of pure consistency, no distractions, making yourself 2% better everyday. It takes 180 days to reach 1% of any skill in Software Engineering.

Apologies for the extremely long post. I'll be answering any questions that you have in the comments. Please do not ask for my credentials and personal details, I will not reveal that (in comments or DMs).

Good resume template used by Google and Apple employees:
https://docs.google.com/document/d/11sNLxF8_mR6lisuRf7TZ-si1VevA_Jn8-qvERAnpJd0/edit

Template for sending a connection request:

Hey <name>, I'd like to connect with you to explore an internship opportunity with <company>. I'm an undergrad student, have interned as a Frontend Engineer at <previous company>, and have experience in JS, TS, React and Vue.

You can know a bit more about me at <portfolio link>

Regards,
Yash

Template for cold DM's on LinkedIn:

Hey <name>,

I'm Yash, an undergraduate student and a Frontend Engineer, and I was wondering if I could Intern at Ledger with the frontend team! Here's a bit about me:

Portfolio: <https://<portfolio>.com>

Resume: <https://<resume>.com>

Github: <https://github.com/<name>>

Appreciate your time!
Regards,
Yash

Template to follow up a cold DM:

Hey <name>,

Just following up on my previous message, I reached out to <HR> over mail, and he said that they will get back ASAP, but I haven't received any update till now. I know your and your team's time is valuable, so just wanted to know if they will be considering any application for an intern at the moment or not.

I really look forward to an opportunity to work with the team building epic stuff out there :)

Best, Yash
Hope this all helps for folks preparing for the next switch/their first job!