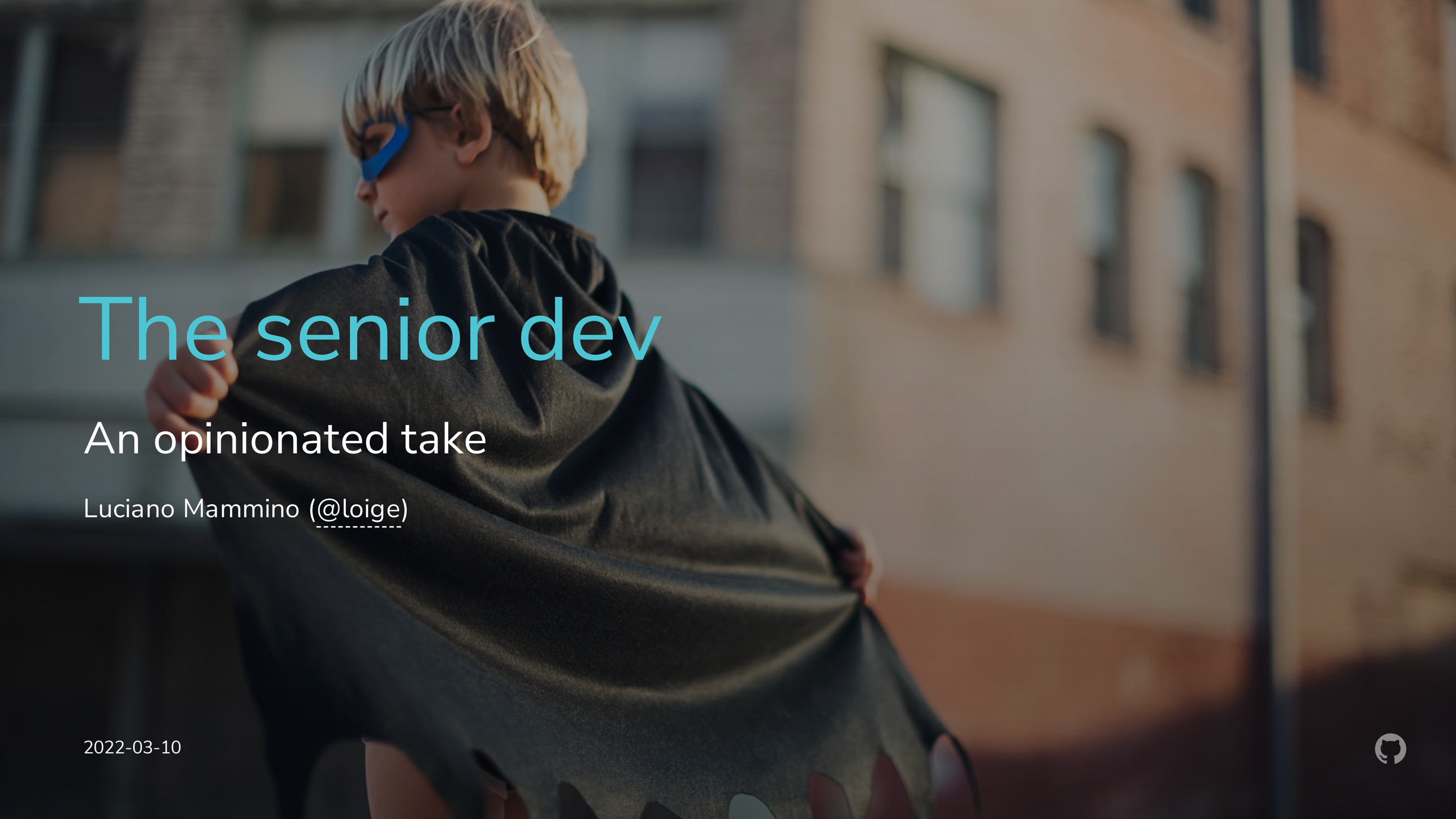

The senior dev

An opinionated take

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Agenda

- Discuss what is expected from a **senior software engineer** (skills, mindset, duties)
- Packed with *opinions** (my own and m o re)
- For devs **to be inspired**
- For managers to **hire**, **set expectations**, **support**, and **evaluate**

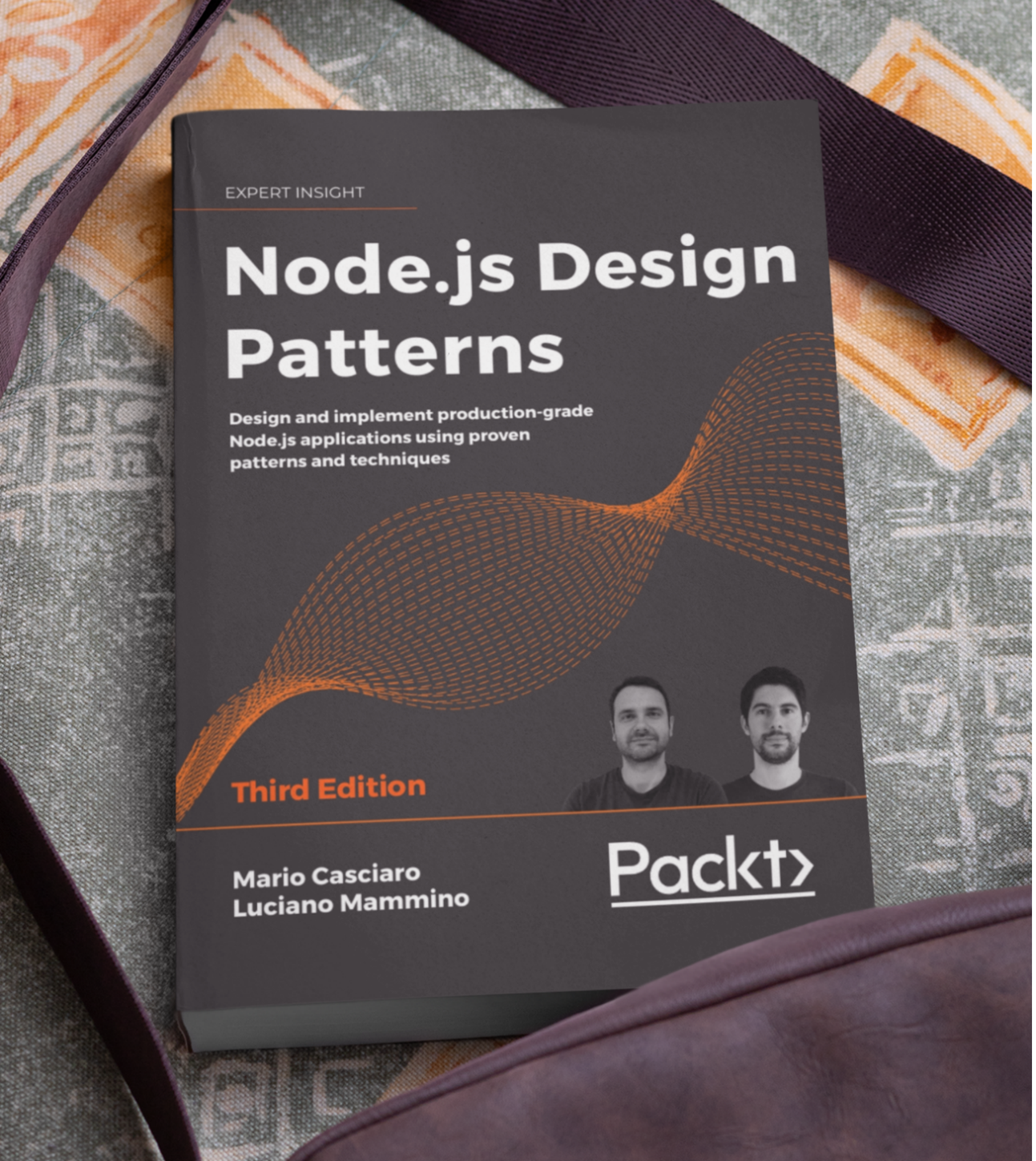
* opinions are subjective

Photo by Alexander Milo on Unsplash

Meta slide

These slides are already online if you want to grab them! 👇

loige.link/senior



Hello

👋 I'm Luciano

- **14 years** in the industry
- **Senior Architect** at fourTheorem
- Co-author of Node.js design Patterns
- ❤ **Node.js**, **AWS** & learning **Rust** 🦀

Let's connect

- Blog
- Twitter
- LinkedIn
- GitHub
- Twitch
- YouTube

nodejsdesignpatterns.com

A senior engineer

- The definition changes in every company
- There are many levels of seniority: senior, staff engineer, principal, etc.
- My definition: **moves projects & people forward** (*"Force multiplier"*)
- **Not** a hero (or rockstar, superstar, magician, unicorn, etc.)

Photo by Rudolfo Spott on Unsplash

It’s not just about time or age

- ~~5 years of experience~~
- ~~At least 28 years old~~
- More time ?== more senior…

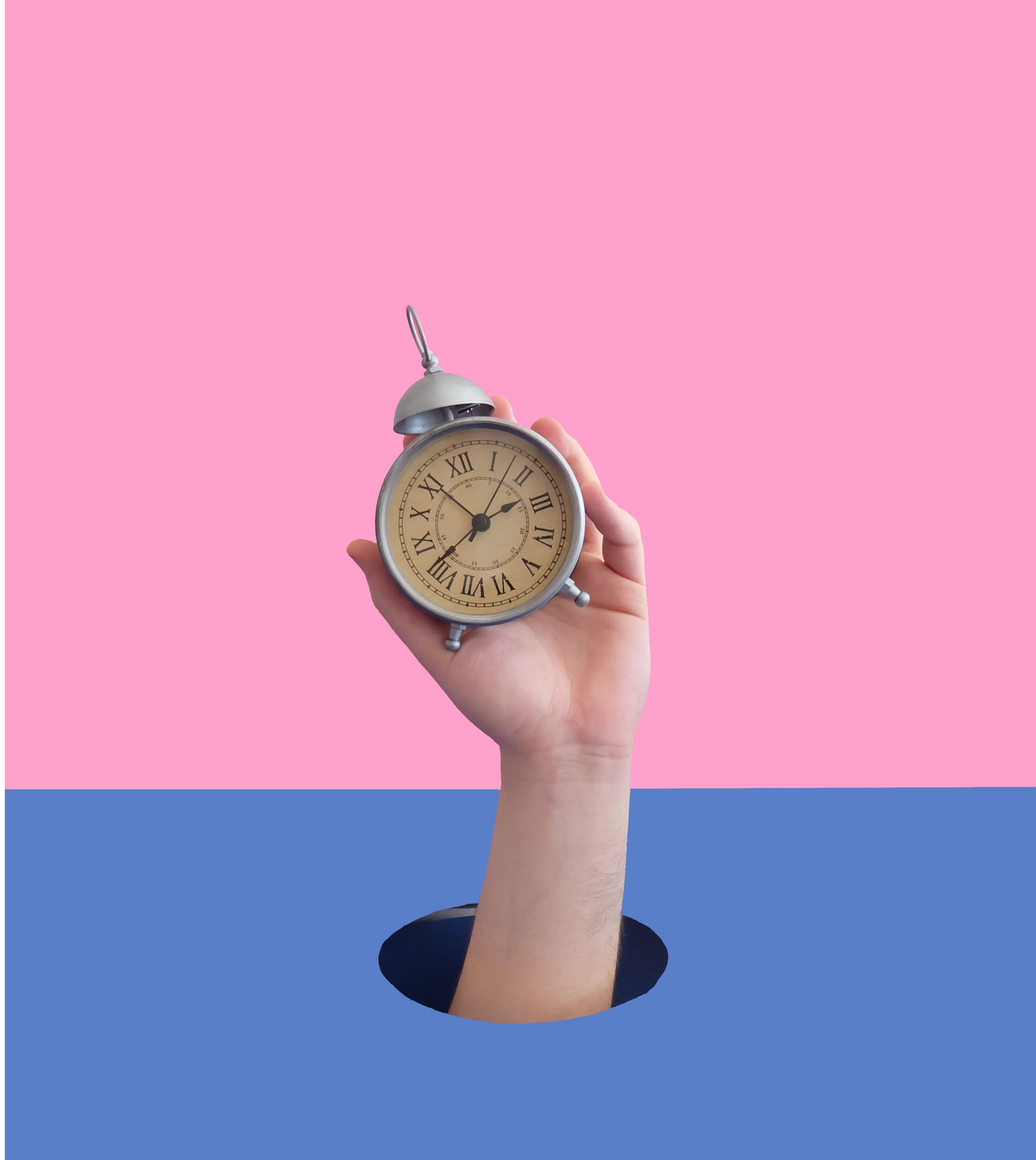


Photo by Elena Koycheva on Unsplash

Skills

Tech skills (hard skills)

🤗 Somewhat important!

Photo by Moritz Mentges on Unsplash

Soft skills

🔥 Very important!

Photo by Icons8 Team on Unsplash


Tech skills

- **T-shaped profile**
  - Master at 1 thing
  - Proficient at many other things
- Broad understanding of the system
  - (architecture, code structure, testing, deployment, scalability)
- Comfortable with different programming languages and paradigms
- Understands technical tradeoffs
  - Eg. Monolith vs Microservices, Memory vs CPU, scalable vs low latency, Reusable vs bespoke, Complex (but powerful) vs Simple (but limited)
  - Can optimizes for the most relevant ones
  - Understands the short vs long term impact of these
- Keeps track of technical debt and helps to pay it back
- Understand best practices
- Can suggest patterns that have good long term effects and avoids other that might lead to problems
- Can solve a problem in different ways and with different tools (adaptable, not one size fits all)

Soft skills

- Communication!
  - Be able to talk with all the stakeholders
  - Be able to talk about failures and learnings
  - Planning, drive cerimonies
  - Can write docs, deliver presentations
  - Can make complex topics digestable
- Autonomy
  - Can drive projects that require research and grind
  - But aware of avoiding silos
- Growth (?)
  - Always learning
  - Always teaching / sharing
-

Traits of a Senior Engineer

- T-shaped profile (strong at one thing, understands many things)
- A bridge between product and tech
- Force multiplier (makes other better)
- Mindset of "always-be-learning"
- Soft skills
- Set expectations
  - What does it mean to be successful in the current environment
- Positive attitude:
  - Don’t blame the system
  - Propose solutions
  - Facilitate conversations
  - Help to find compromises

Attitude

- Humble: Know when to say "I don’t know"
- Value collective success over individual performance
- Keeps the project goal in mind and help to optimise for it (*follow the north star*)
- Take ownership
- Knows how to get unstuck (don’t just wait idle when facing difficulties)
- Confidence that hard problems can be solved even if we don’t know how yet

Suggestions on how to grow

- Go 1 level deeper!
  - Be curious
  - Dig deeper
  - Ask why
  - Ask how does this work (UTF-8, SHA512, DNS, etc.)
    - https://www.youtube.com/watch?v=H565avw-ufk (Computer Science Iceberg)
  - Ask yourself "how would I have implemented this"
- Have fun
- Attitude:
  - Help others, especially at the early phases of a project/feature
    - Your experience might be valuable to avoid common design mistakes early on (e.g. defining data models for dbs/events and keeping those documented and versioned)
  - But don’t do the mistake of thinking that there’s only one solution