

Software Engineer's Life Manual

How to live and build a successful career as a software developer,
even if you are self-taught

Module 01

Lets Start!

Ali Samanipour

March. 2023

- 1 Mindset and Attitude
- 2 Skills Sets
- 3 Portfolio & Resume
- 4 Learning Roadmap
- 5 Career Path
- 6 Job Finding

Growth Mindset and Attitude

“Nothing in this world can take the place of good old persistence. ***Talent won't.*** Nothing's more common than unsuccessful men with talent. ***Genius won't.*** Unrecognized genius is practically a cliché. ***Education won't.*** Why the world is full of educated fools. **Persistence** and determination alone are all powerful.”

Raymond Albert Korc

Growth Mindset and Attitude

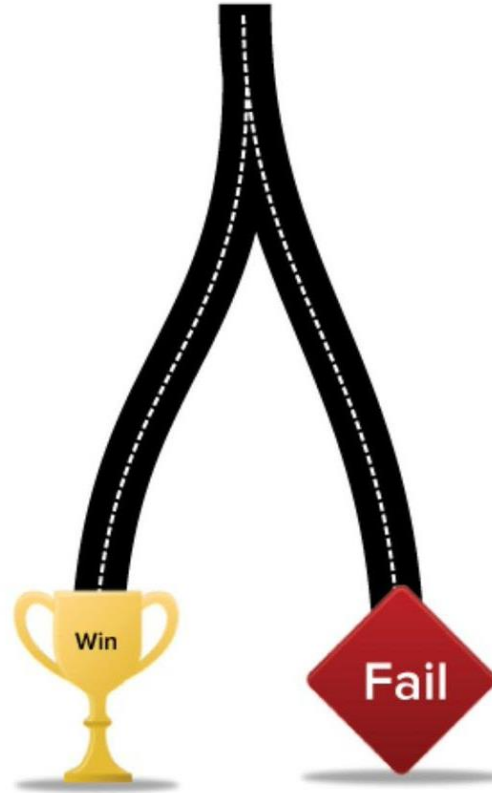
“The Fifth Law: With persistence success can come at any time.”

Albert-László Barabási

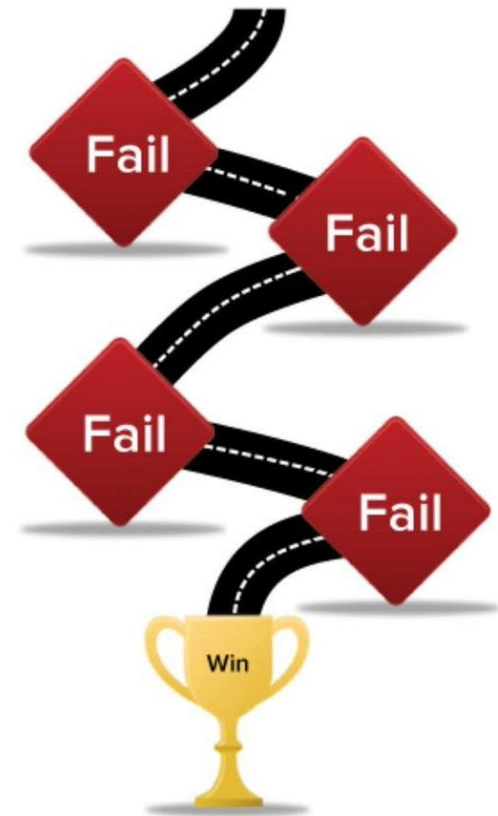
Congratulations!!
You've Don It

Fail Fast
Fail Early
Fail Forward

What Most
People Think



What Successful
People Know

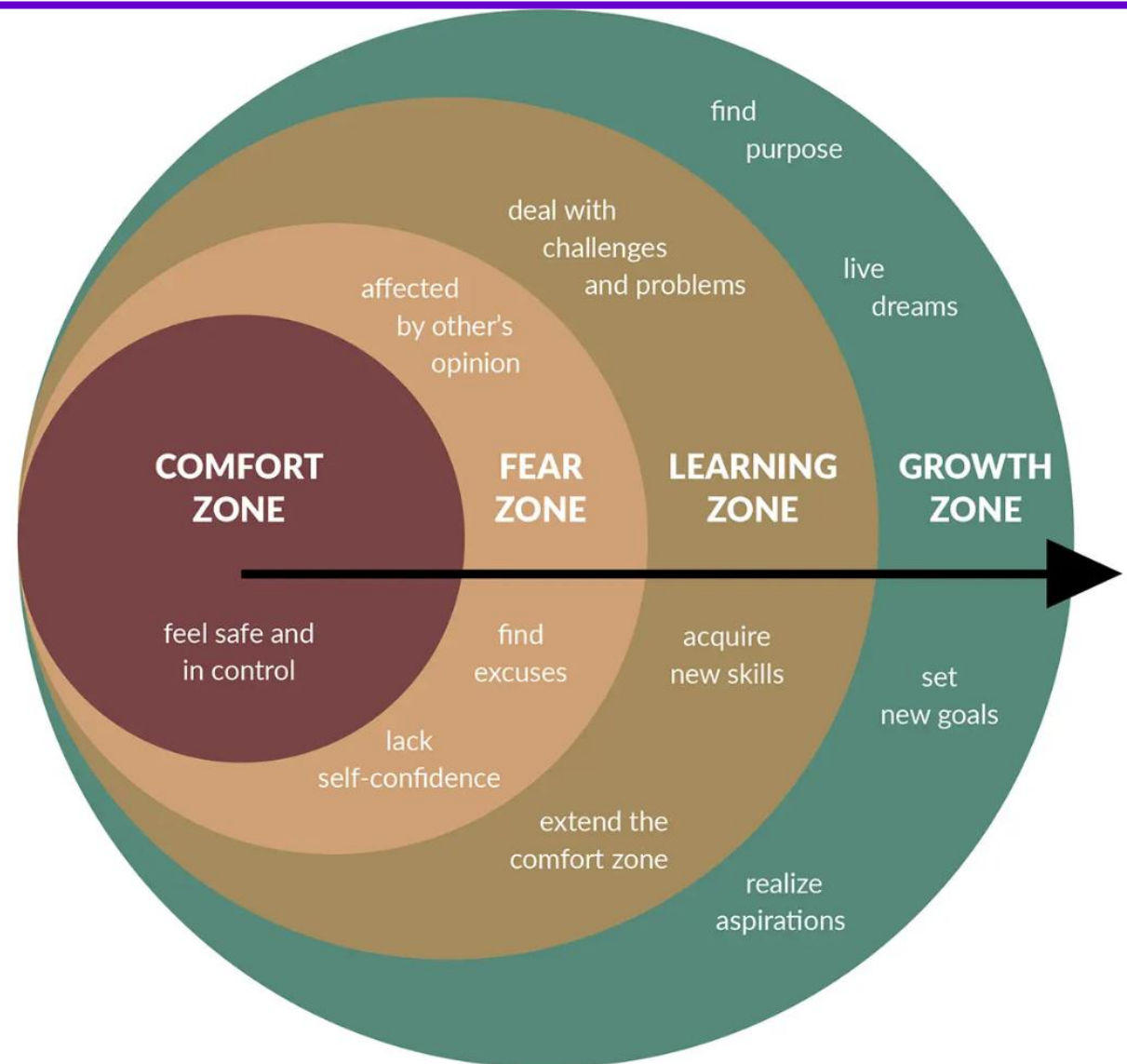


@douglaskarr

Form Comfort to Growth

“If the road is easy,
you're likely going
the wrong way.”

Terry Goodkind



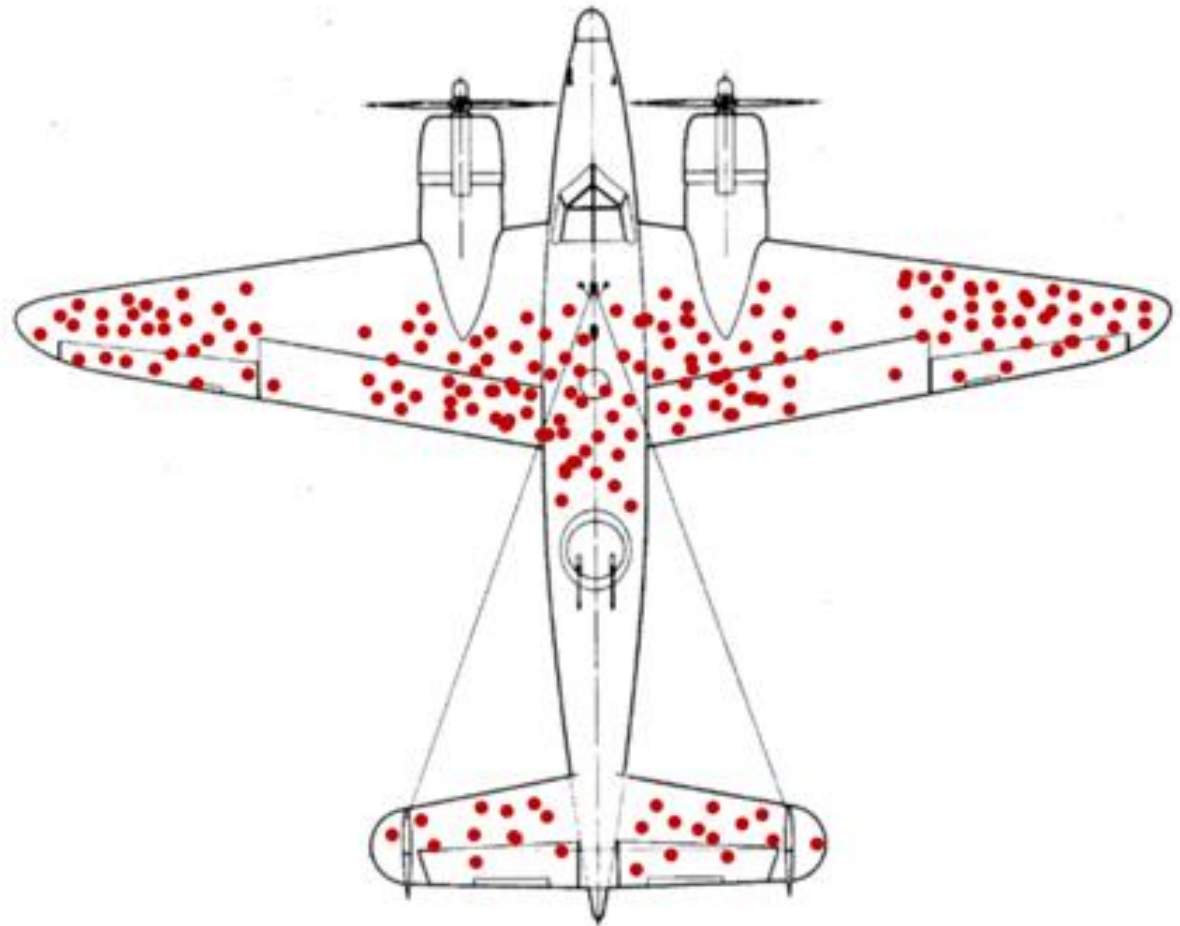
Growth Mindset and Attitude

““If you want to be successful, **learn from the other people's mistakes**, don't learn from the successful stories.”

Jack Ma

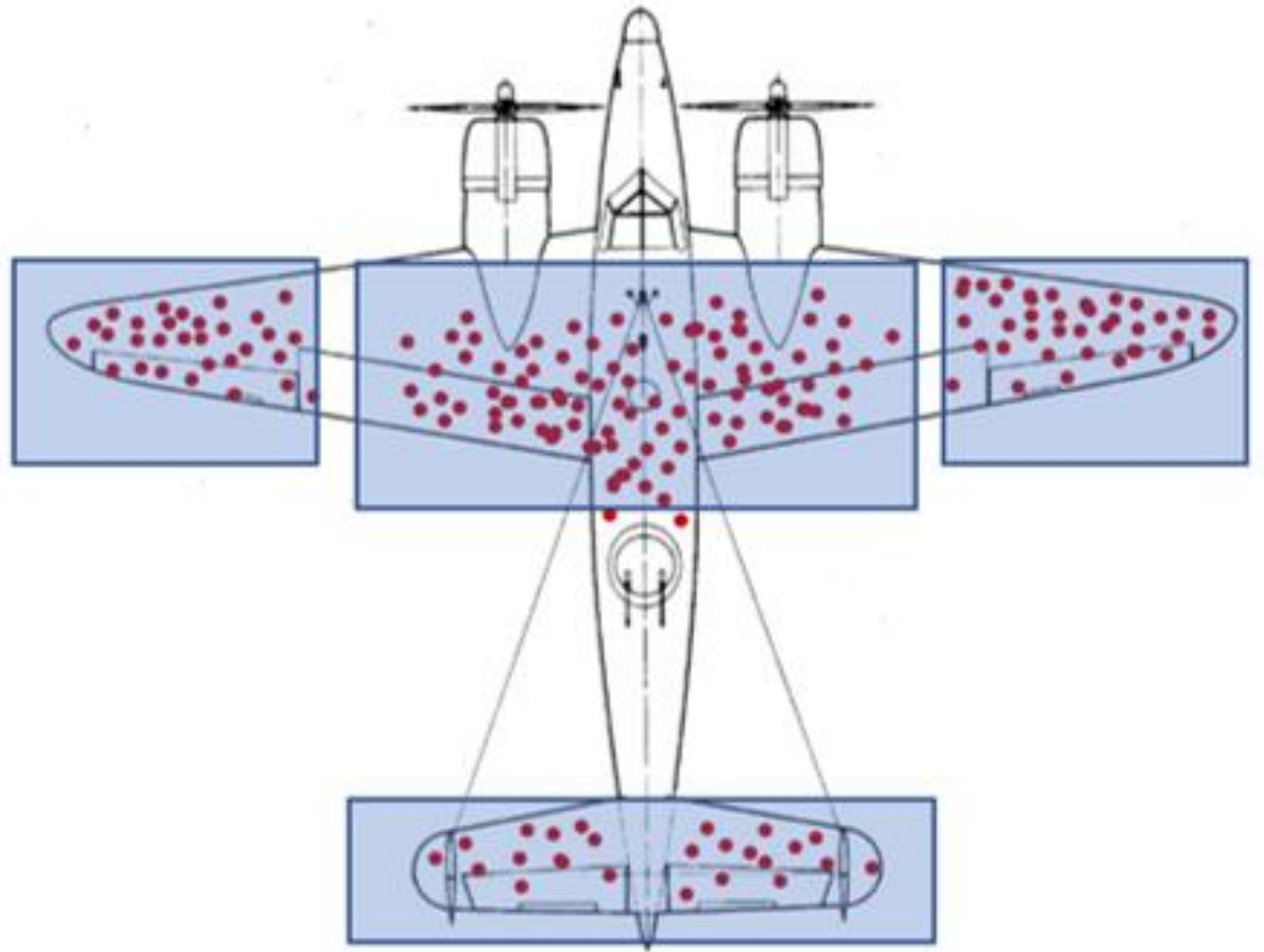
Survivorship Bias

Our data is only from returning flights. Visualization of the places that bullet holes were observed.

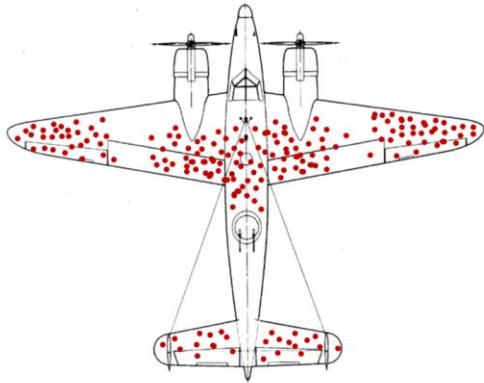


Survivorship Bias (Initial Guess, But Wrong!!)

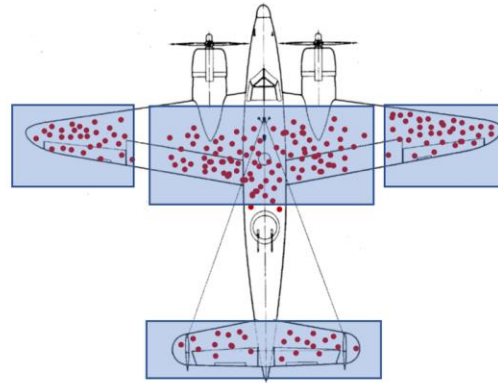
An initial Guess at
how to fix this
might be to apply
additional armor
plating to the parts
of plane with the
most holes



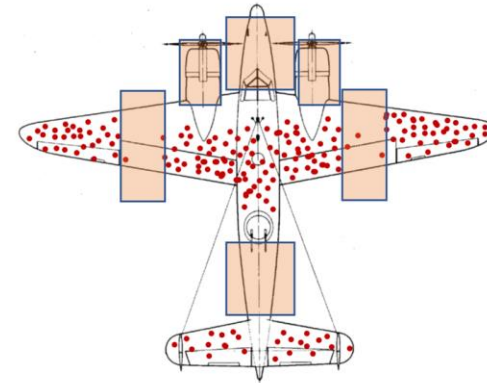
Survivorship Bias (The Right Answer)



Our data if only from returning flights. Here we a visualization of the places that bullet holes were observed.



And initial guess at how to fix this might be to apply additional armor plating to the parts of the plane with the most holes...

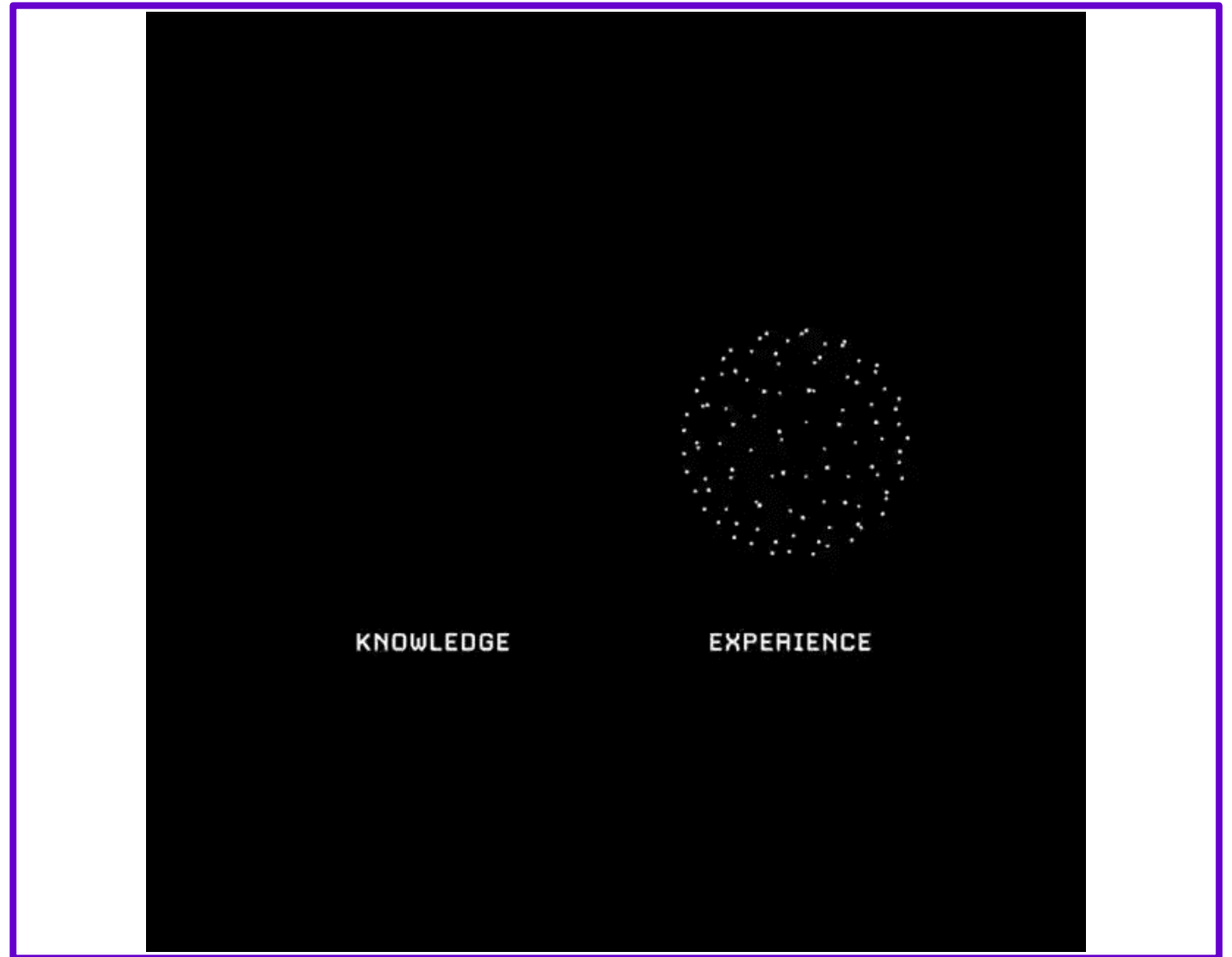


.... However this is where planes that *returned* had bullet holes. The planes we want to protect are the ones that did *not* return, so we should place armor there.

- 1 Mindset and Attitude
- 2 Skills Sets
- 3 Portfolio & Resume
- 4 Learning Roadmap
- 5 Career Path
- 6 Job Finding

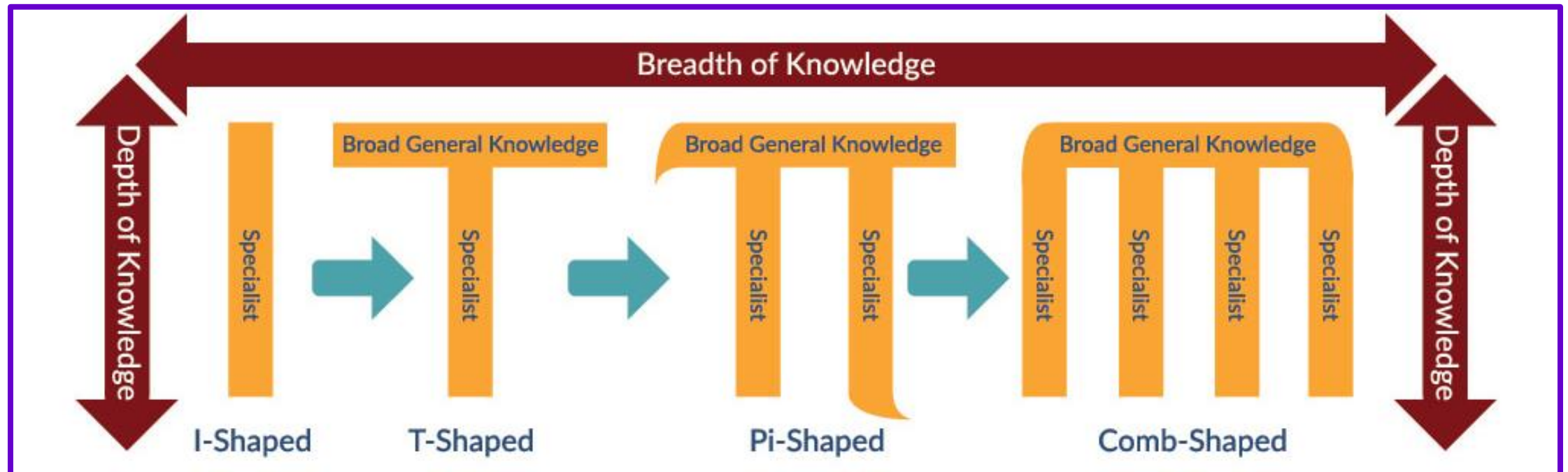
Your Portfolio (Knowledge vs Experiences)

Knowledge collects
the dots,
Experience
connects the dots.



Your Skill Set and It's Shape

Now days you should at least have a T-Shaped Skills Set



Soft Skills vs Hard Ones

Soft Skills shape
your mindset, Hard
Skills shape your
experience and
your knowledge



- 1 Mindset and Attitude
- 2 Skills Sets
- 3 Portfolio & Resume
- 4 Learning Roadmap
- 5 Career Path
- 6 Job Finding

Your Portfolio (LinkedIn.Com)

Online Resume
+
Networking
+
Job Opportunities
+
Learning



Your Portfolio (For Developers and Programmers)

You will be evaluated and judged by your not only by your knowledge (certificates) but also by your experiences you have



+



1

Mindset and Attitude

2

Soft Skills vs Hard Skills

3

Portfolio & Resume

4

Learning Roadmap

5

Career Path

6

Job Finding

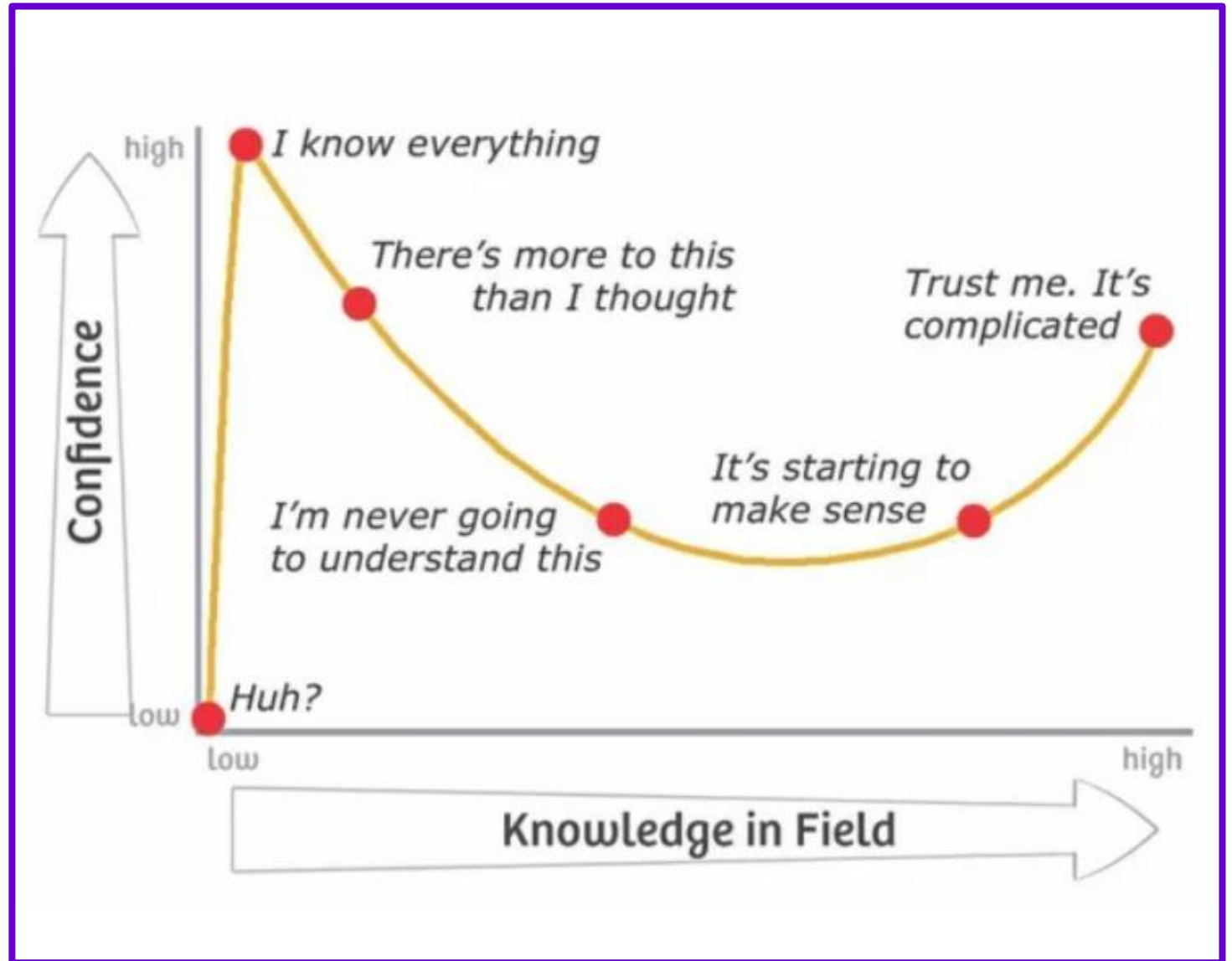
Growth Mindset and Attitude

“Humankind is facing unprecedented revolutions, all our old stories are crumbling, and no new story has so far emerged to replace them. How can we prepare ourselves and our children for a world of such unprecedented transformations and radical uncertainties?.”

Yuval Noah Harari

Your Confidence vs Your Knowledge

Dunning-Kruger Effect, a path to seniority

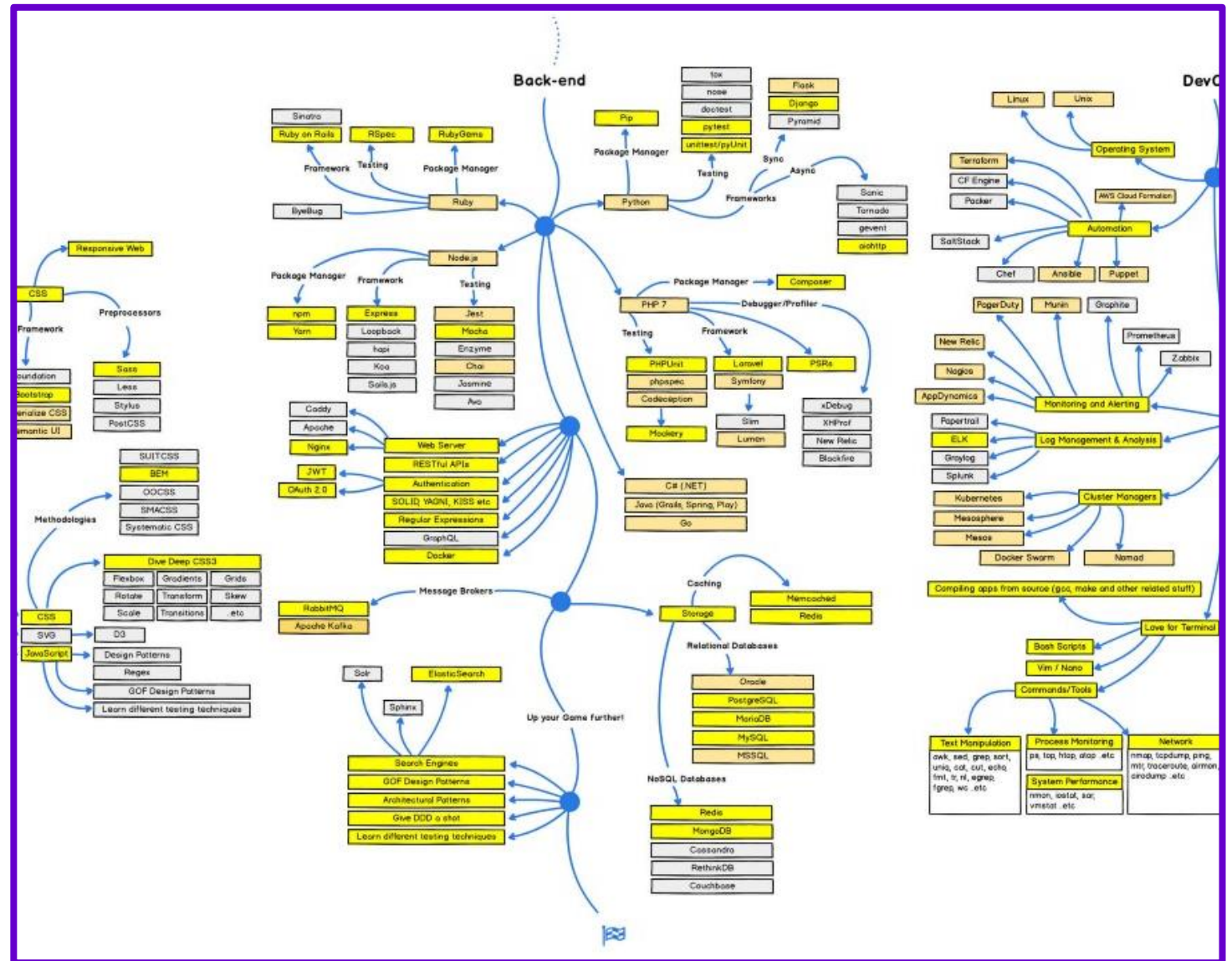


How we should know
what we should know?!
(the next step?!)

1. Get a Mentor

2. Get a Course

3. Use predefined
roadmaps



- 1 Mindset and Attitude
- 2 Skills Sets
- 3 Portfolio & Resume
- 4 Learning Roadmap
- 5 Career Path
- 6 Job Finding

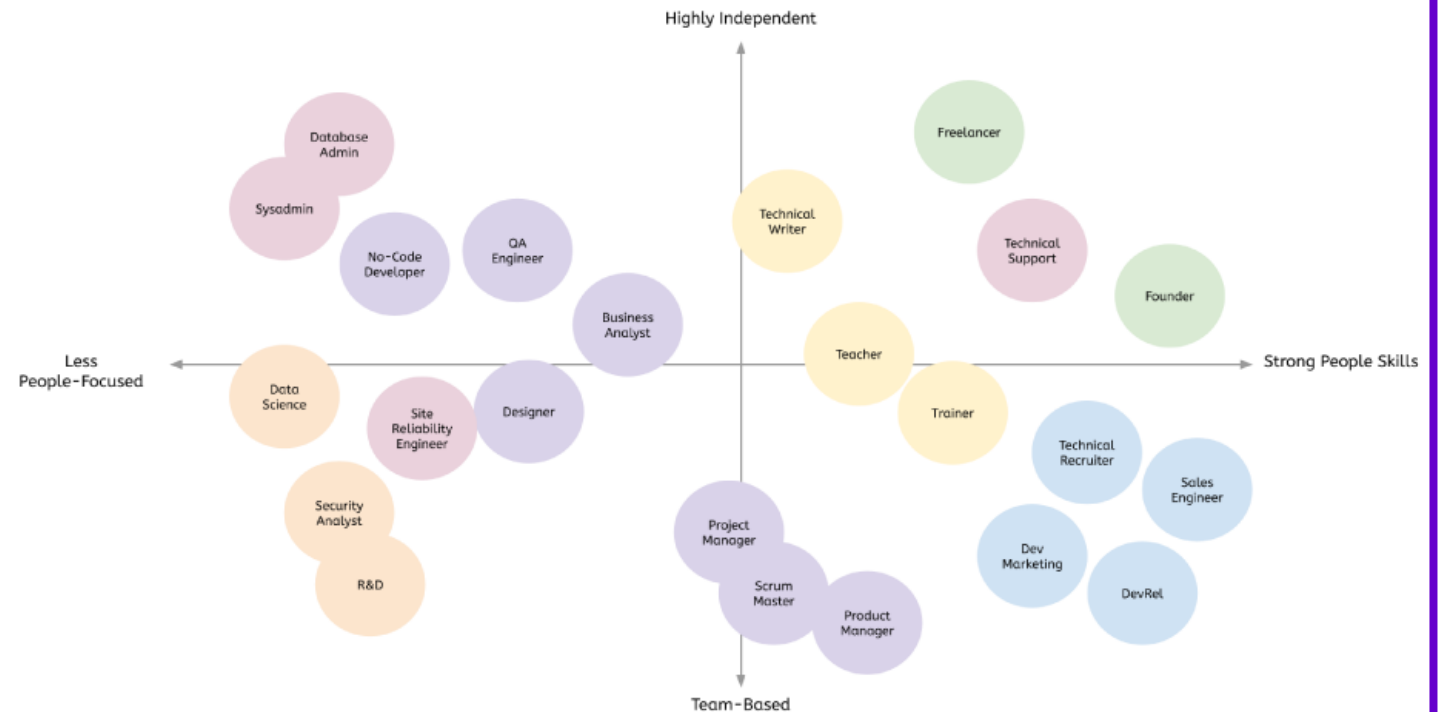
Growth Mindset and Attitude

*“The biggest mistake that you can make is to believe that you are working for somebody else. Job security is gone. **The driving force of a career must come from the individual.** Remember: Jobs are owned by the company, you own your career!”*

Earl Nightingale

How to choose your field (Your Personality matters)

Independency Type And Skill Type



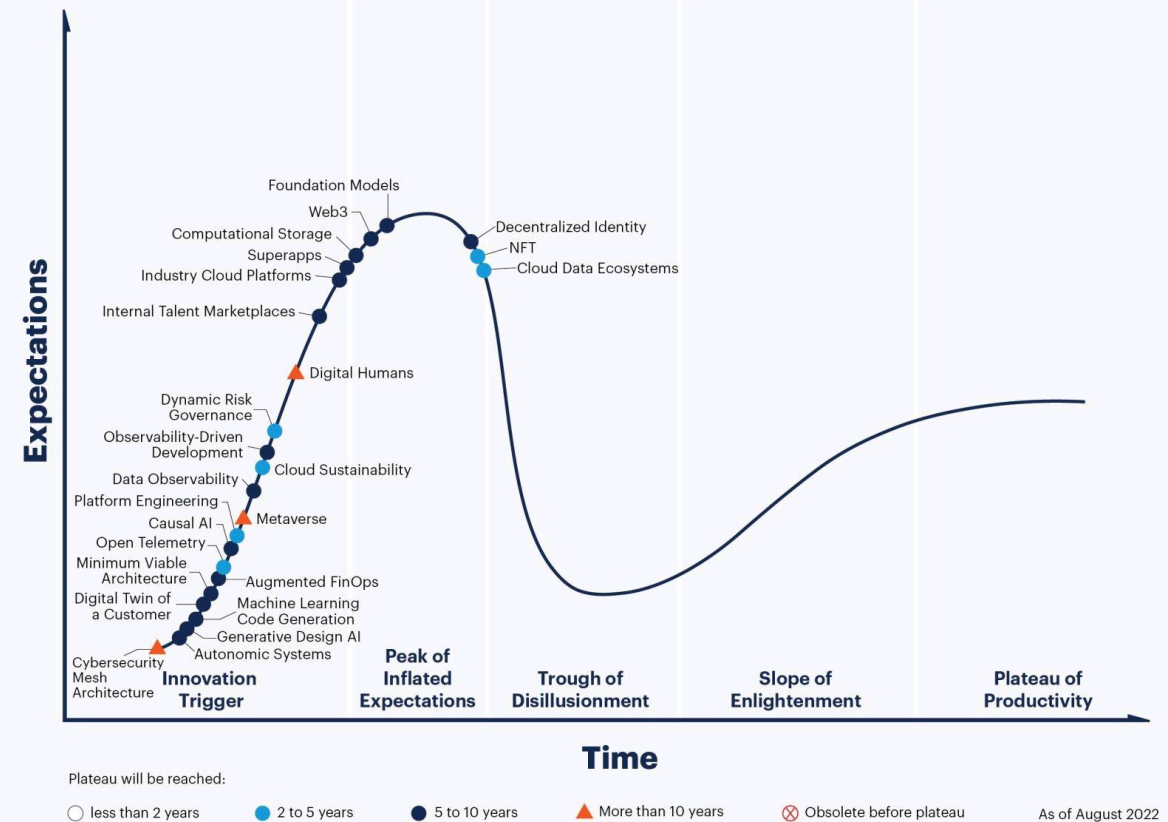
Source: <https://www.freecodecamp.org/news/alternative-career-paths/>

Valuable Knowledge, Market Needs and Trends

How we should know
what we should
know(learn)!?
(to be successful)

Job market and ads
will guide you! But
you should prepare
for the future!

Hype Cycle for Emerging Tech, 2022



[gartner.com](https://www.gartner.com)

Source: Gartner
© 2022 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner and Hype Cycle are registered trademarks of Gartner, Inc. and its affiliates in the U.S. 1893703

Gartner

- 1 Mindset and Attitude
- 2 Skills Sets
- 3 Portfolio & Resume
- 4 Learning Roadmap
- 5 Career Path
- 6 Job Finding

How get a job without any Experience?

You could (should) make your own experience
(don't wait to someone prepare the situations for you)

Apply for free or paid Internship

Contribute to open-source projects on GitHub

Work on your own project and published it

Collaborate on Stack overflow or online judge platforms

Course References

- J. Harper, *A Software Engineer's Guide to Seniority: A Guide to Technical Leadership*. Apress, 2022.
- F. Doglio, *Skills of a Successful Software Engineer*. Manning, 2022.
- F. Sazanavets, *The easiest way to become a software developer, How to get your first programming job, even if you are a self-taught coder*. 2023.
- D. Moore, *Letters to a New Developer: What I Wish I Had Known When Starting My Development Career*. Apress 2020.
- D. Heller, *Building a Career in Software: A Comprehensive Guide to Success in the Software Industry*. Apress, 2020.
- S. S. Wang, *The Coding Career Handbook: Guides, Principles, Strategies, and Tactics –from Code Newbie to Senior Dev*. 2022.

Accessing Course Resource



[linkedin.com/in/Samanipour](https://www.linkedin.com/in/Samanipour)



t.me/SamaniGroup



github.com/Samanipour