

# 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

## Let's Start!

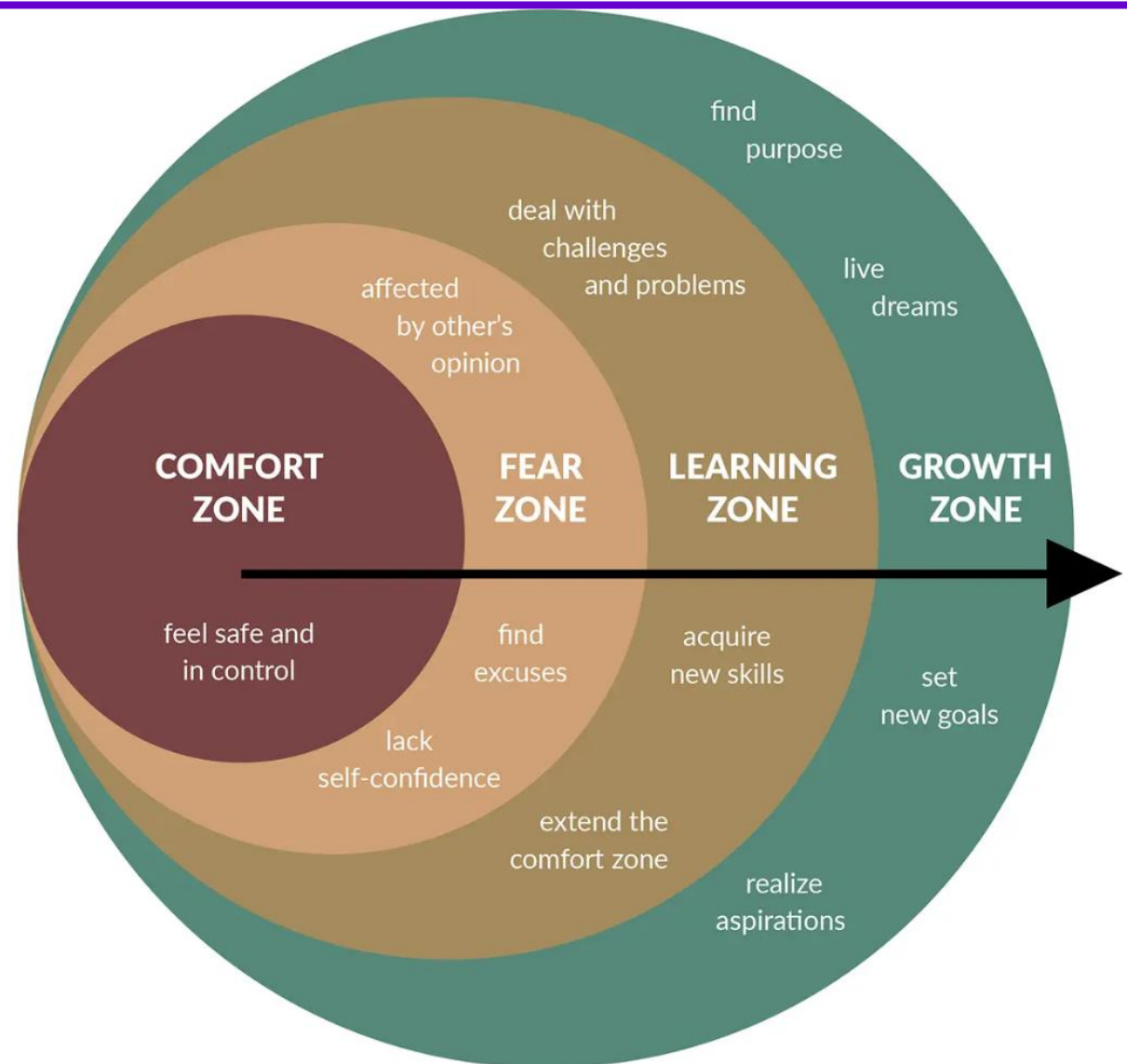
**Ali Samanipour**

March. 2023

## Form Comfort to Growth

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

*Terry Goodkind*



- 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 Kroc*

# Growth Mindset and Attitude

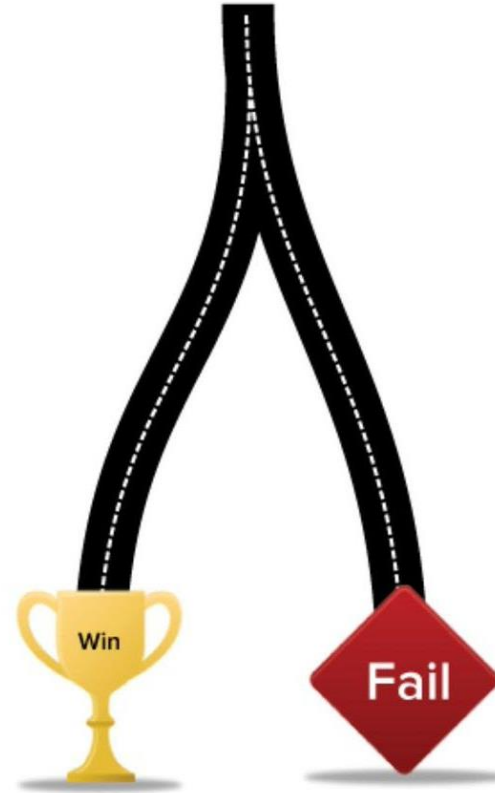
“The Fifth Law: With persistence success can come at any time.”

*Albert-László Barabási*

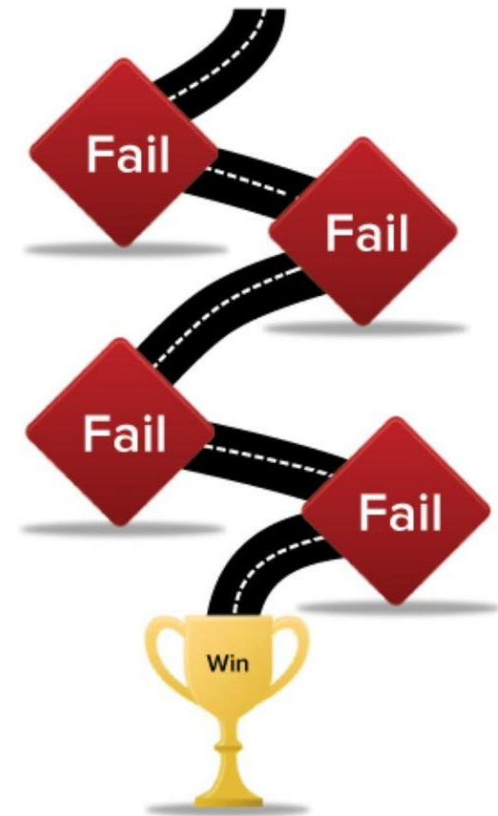
Congratulations!!  
You've Don It

Fail Fast  
Fail Early  
Fail Forward

What Most  
People Think



What Successful  
People Know



@douglaskarr

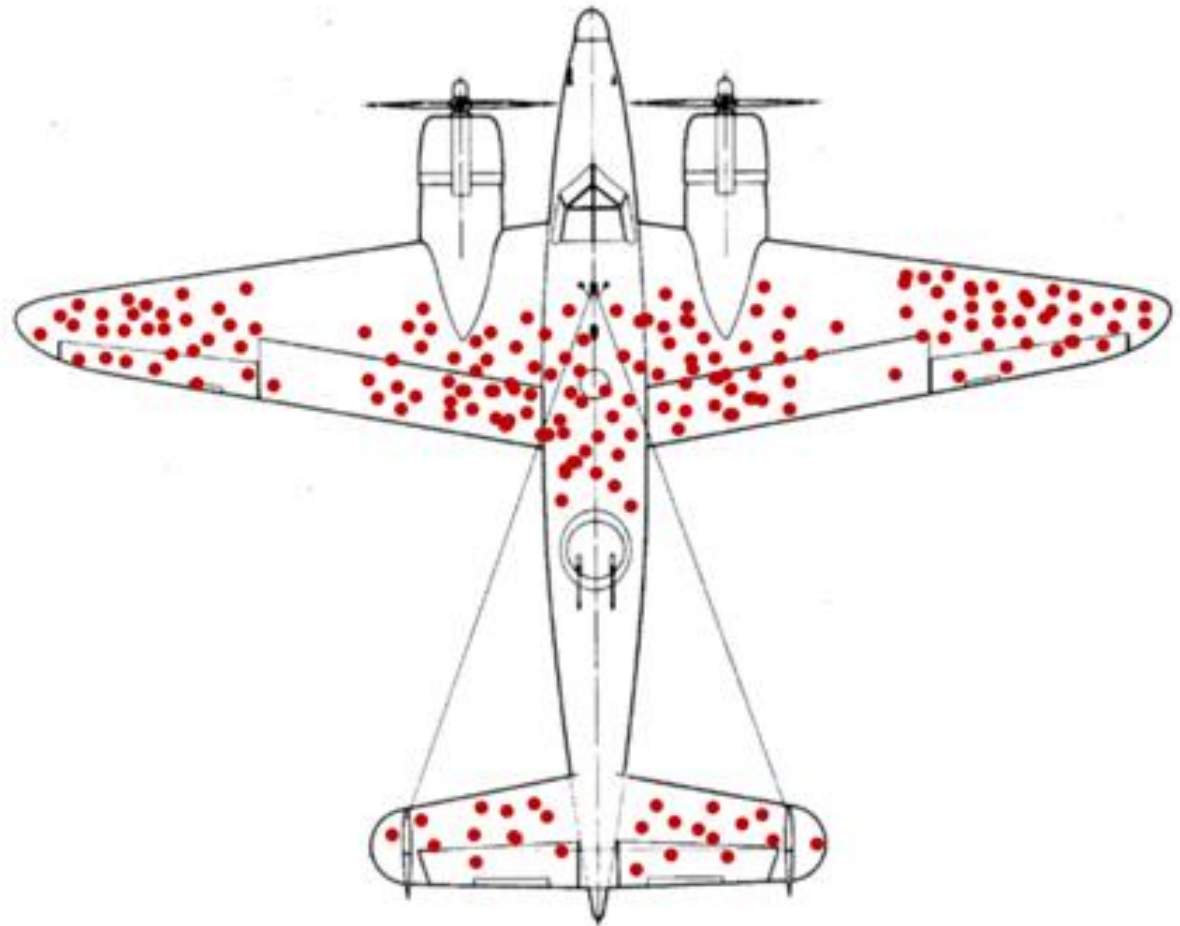
# Growth Mindset and Attitude

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

*Jack Ma*

## Survivorship Bias

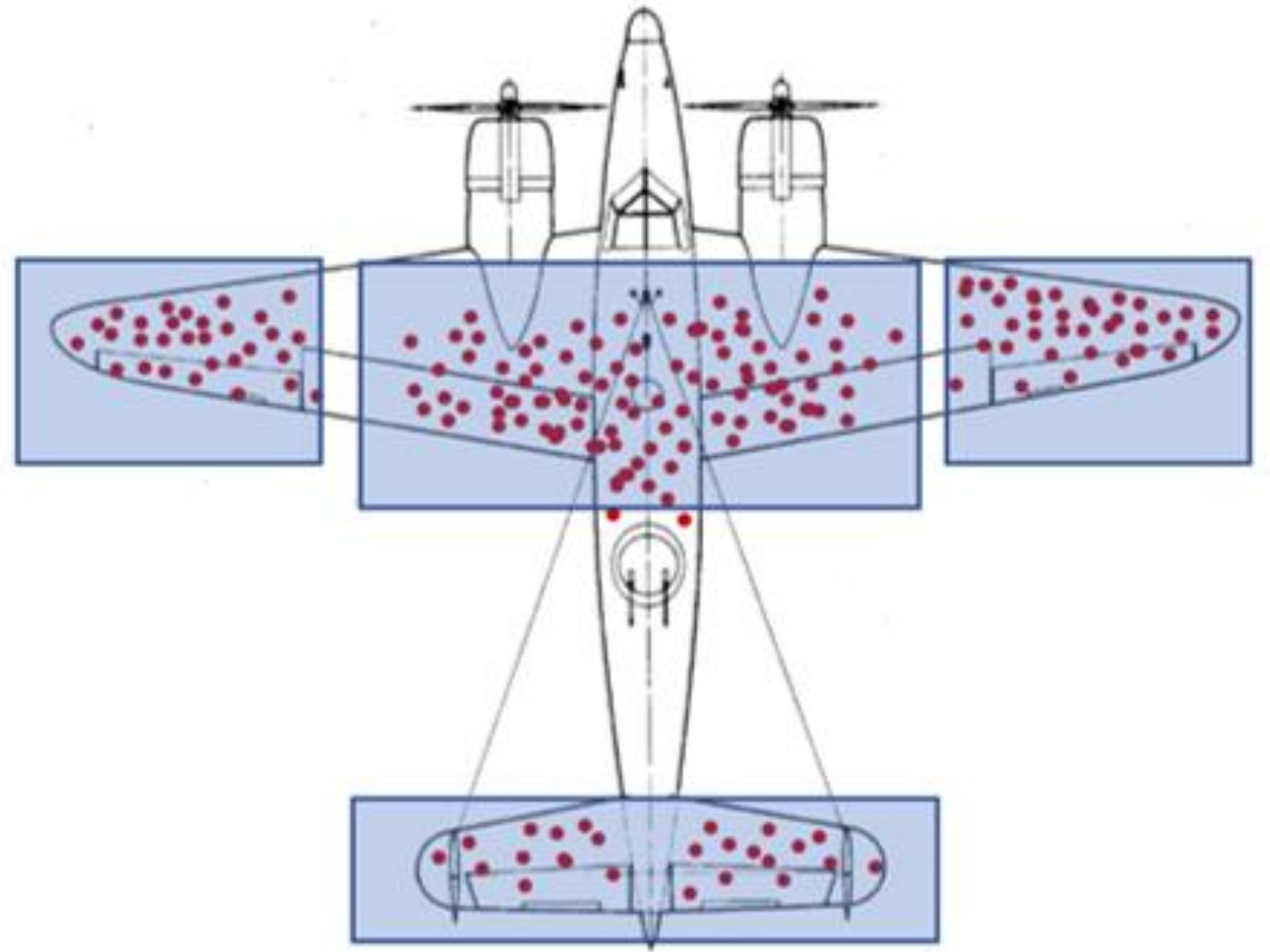
Our data is only from returning flights. Visualization of the places that bullet holes were observed.



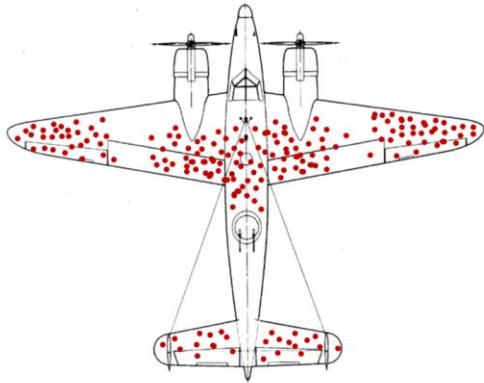


## Survivorship Bias (Initial Guess, But Wrong!!)

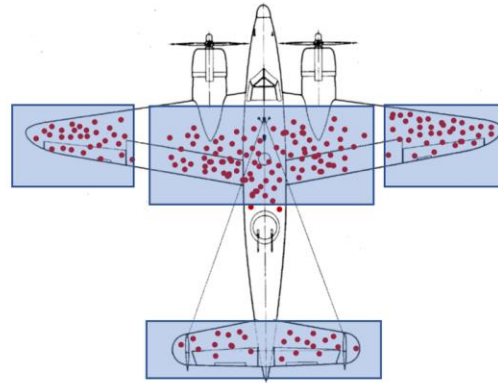
An initial Guess at  
how to fix this  
might be to apply  
additional armor  
plating to the parts  
of plane with the  
most holes



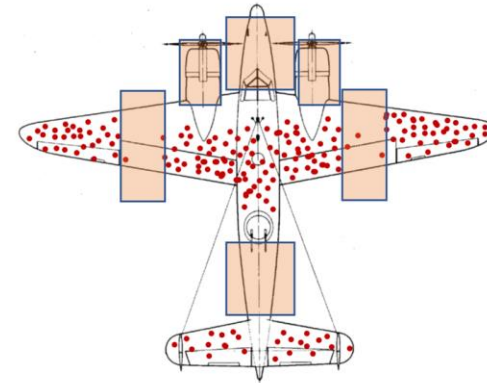
# Survivorship Bias (The Right Answer)



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...

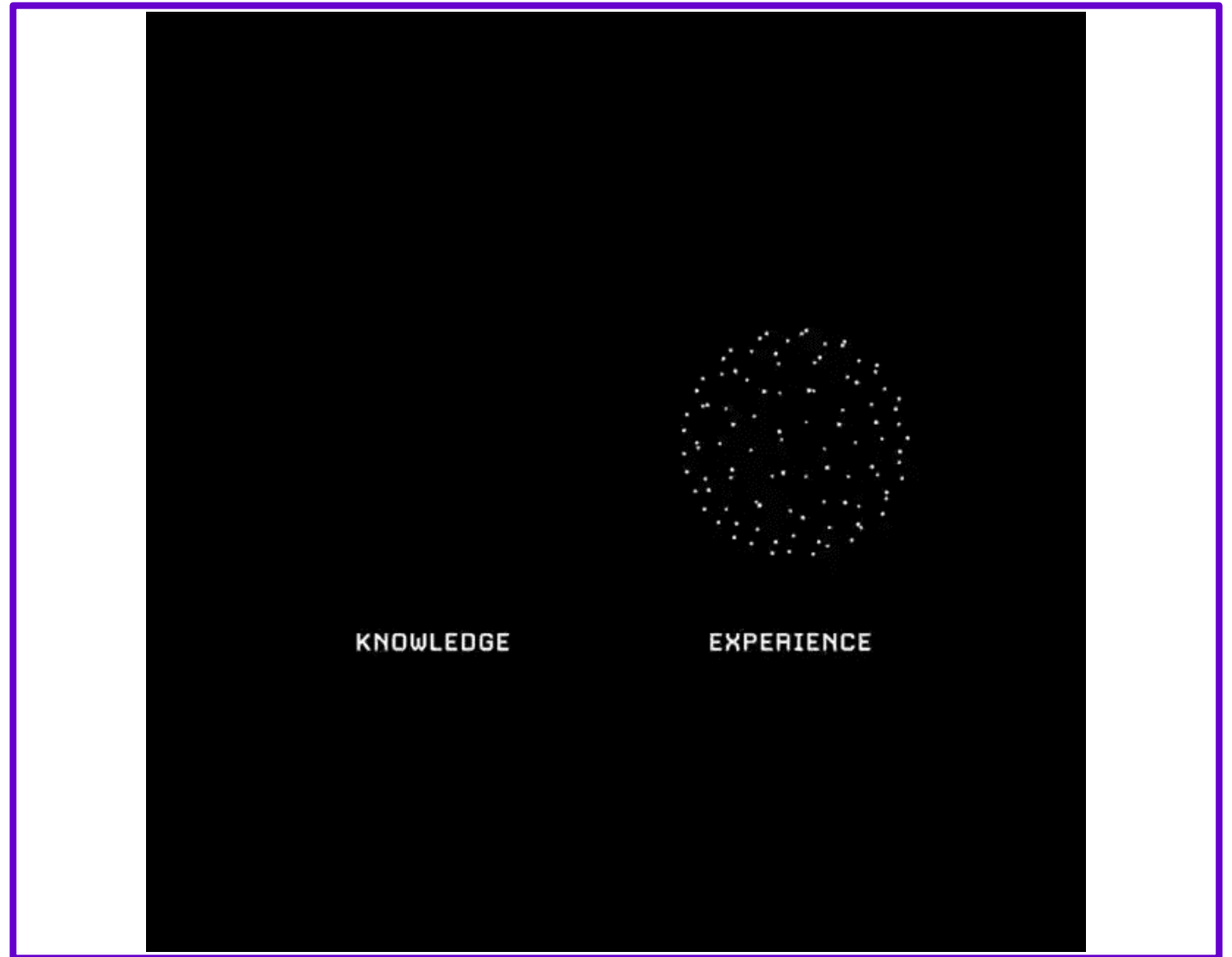


.... However this is where planes that *returned* had bullet holes. The planes we want to protect are the ones that did *not* return, so we should place armor there.

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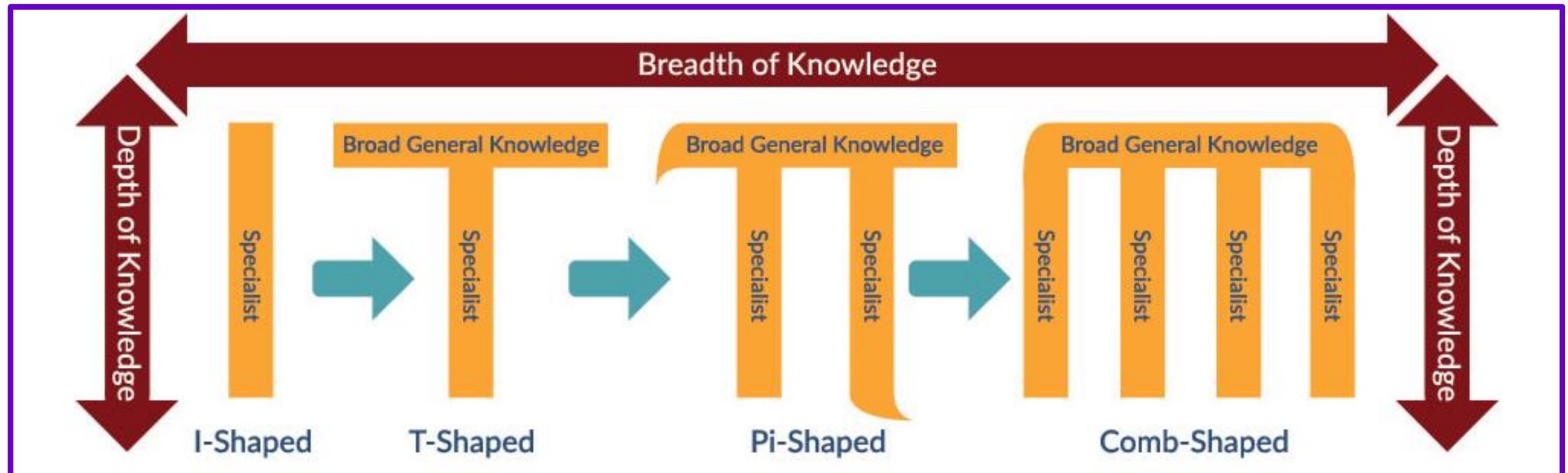
## Your Portfolio (Knowledge vs Experiences)

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



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## Your Portfolio (LinkedIn.Com)

Online Resume  
+  
Networking  
+  
Job Opportunities  
+  
Learning





# Your Portfolio (For Developers and Programmers)

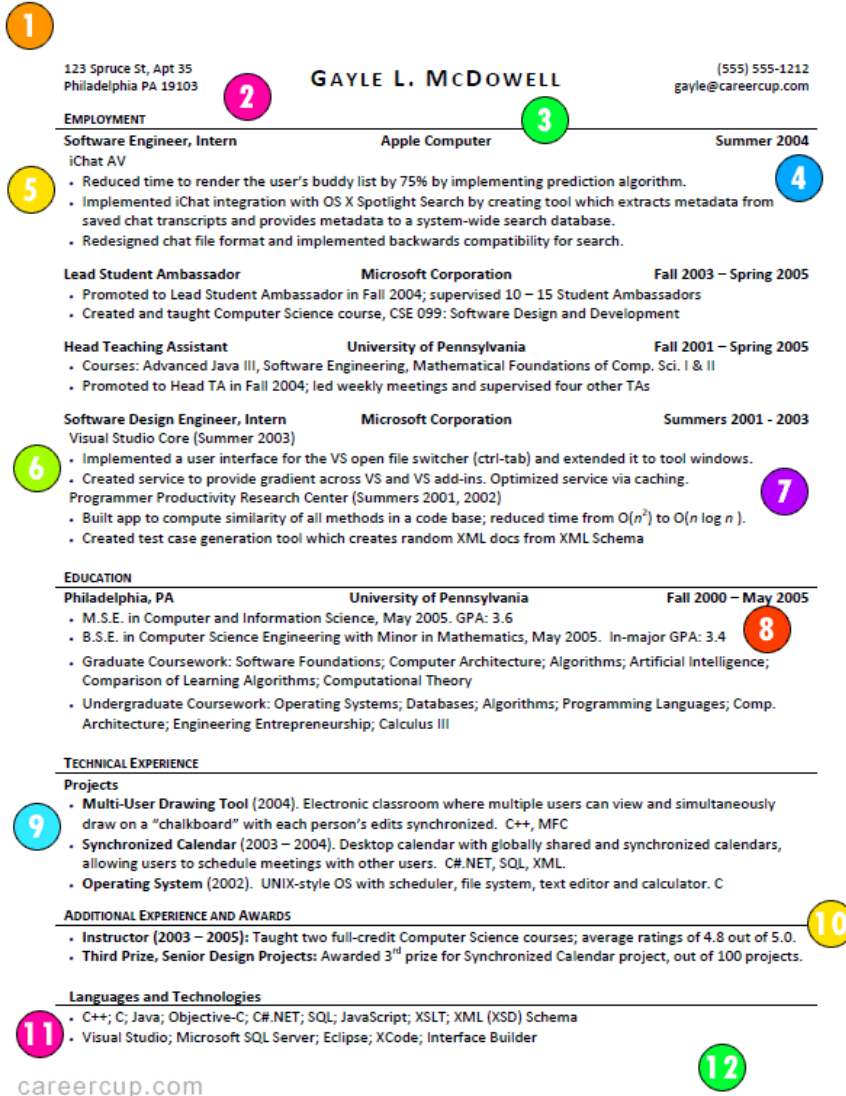
You will be evaluated and judged by your not only by your knowledge (certificates) but also by your experiences you have



+



Market culture matters, But It's better to be one page, single column, without pictures and be a prove for your skills



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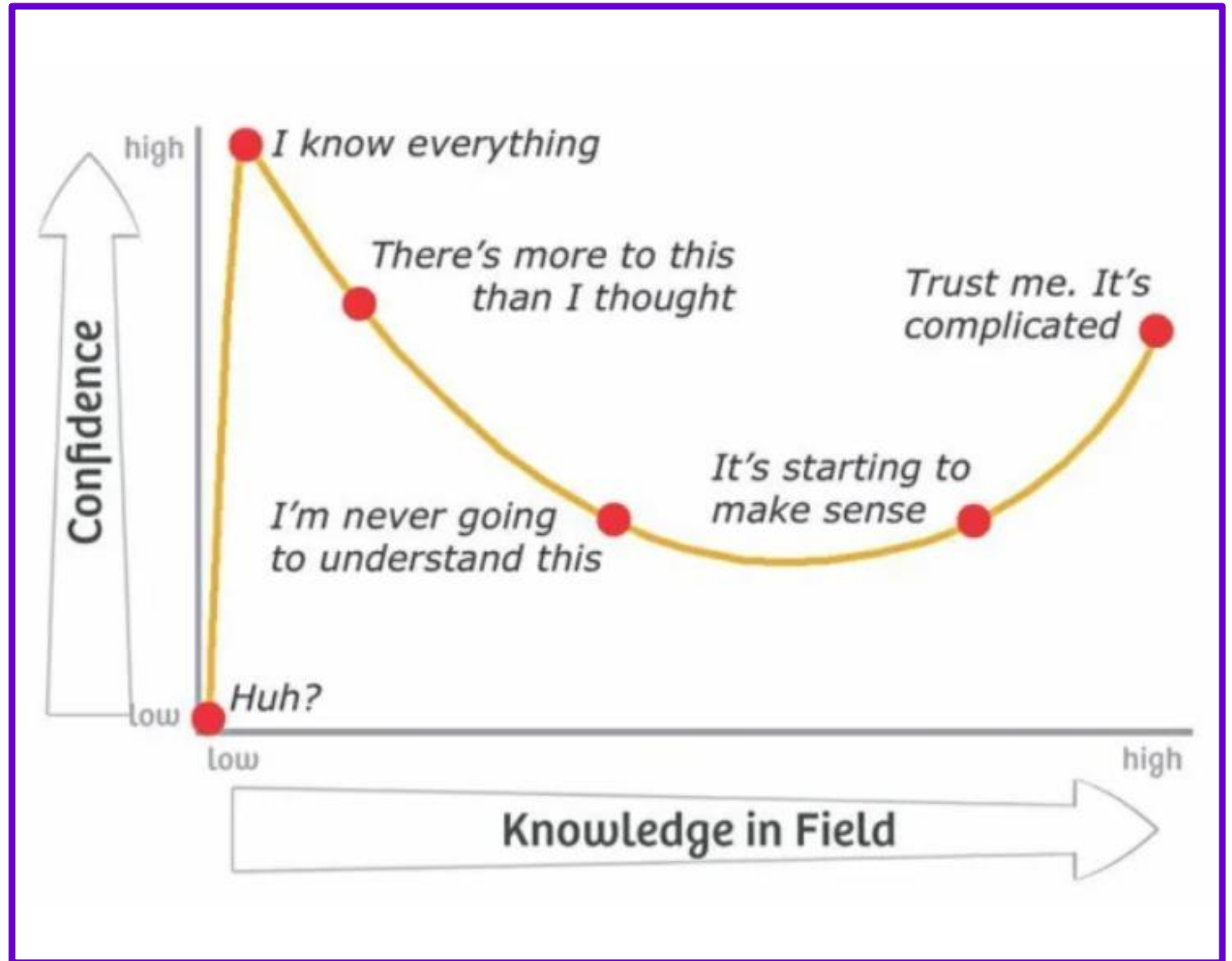
# Growth Mindset and Attitude

“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

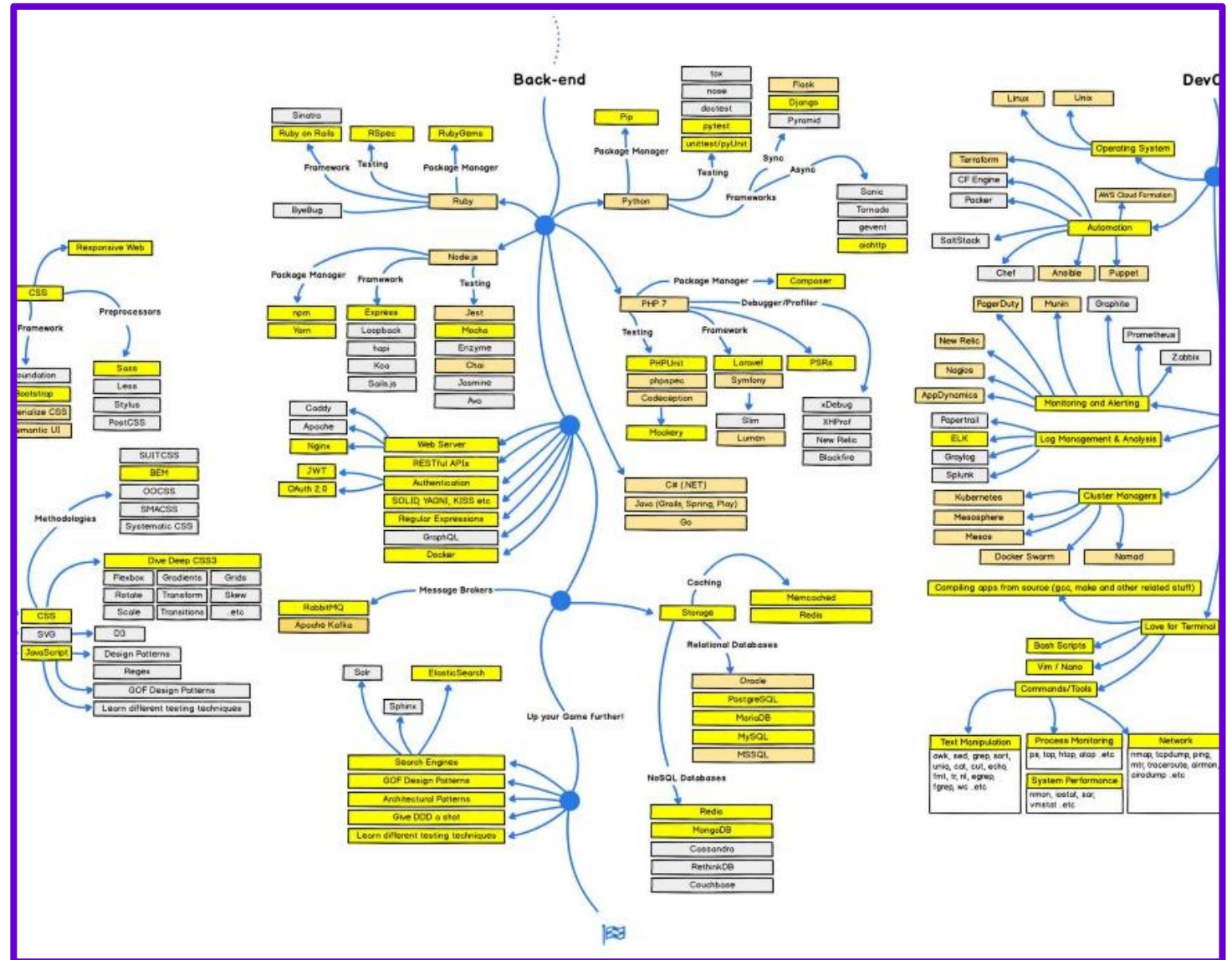


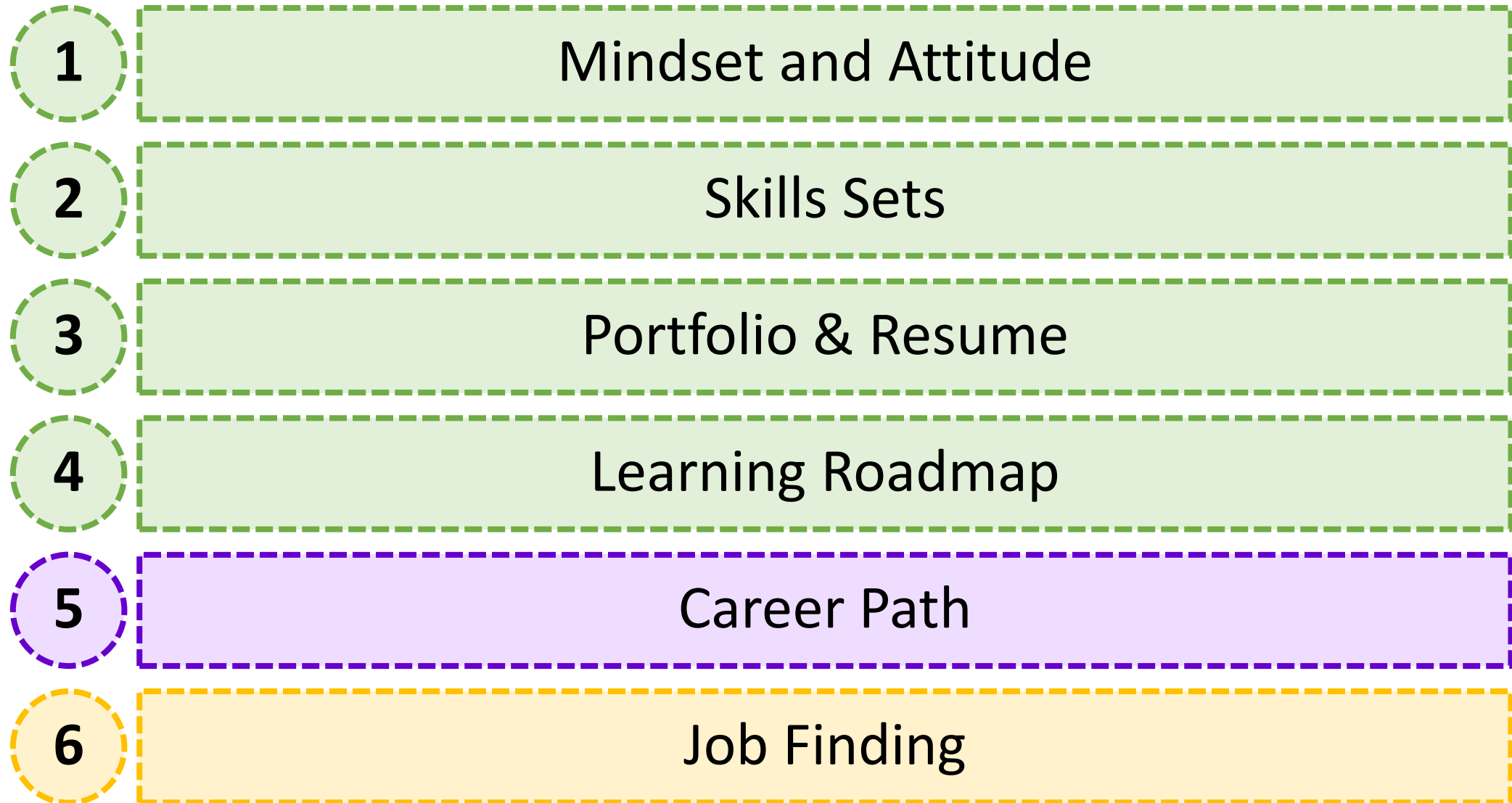
How we should know  
what we should know?!  
(the next step?!)

1. Get a Mentor

2. Get a Course

3. Use predefined  
roadmaps





# Growth Mindset and Attitude

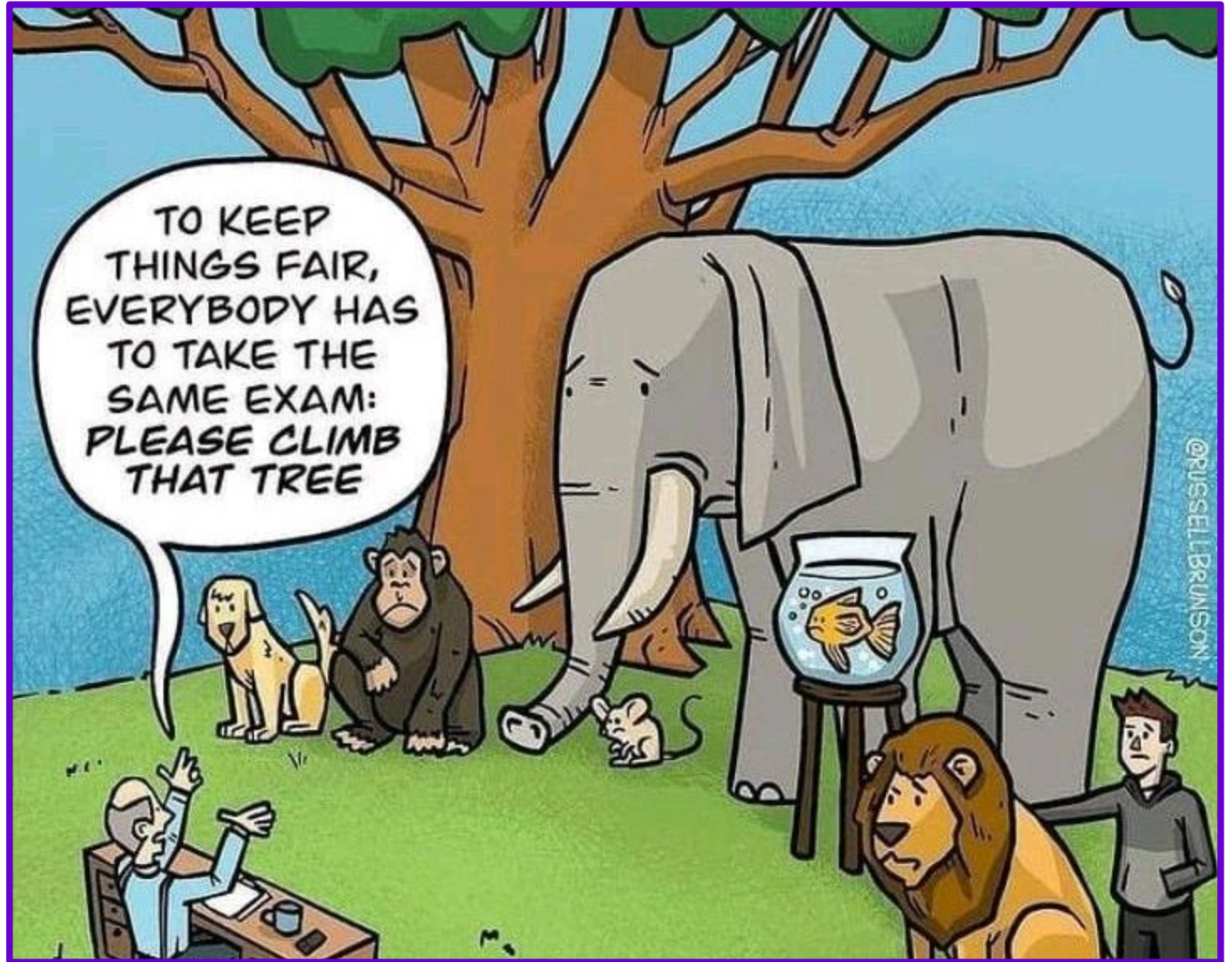
*“The biggest mistake that you can make is to believe that you are working for somebody else. Job security is gone. **The driving force of a career must come from the individual.** Remember: Jobs are owned by the company, you own your career!”*

*Earl Nightingale*



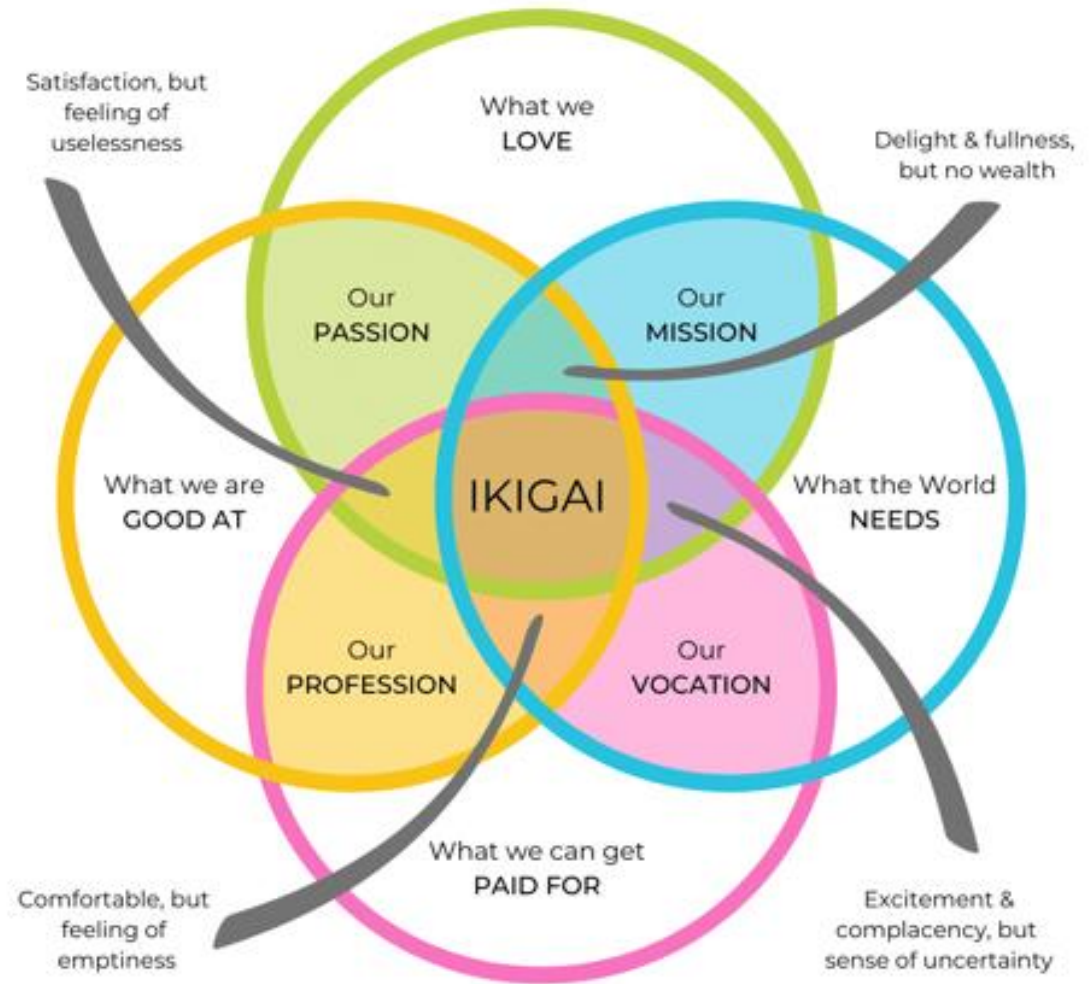
# Your Personality Matters

You should know  
your self



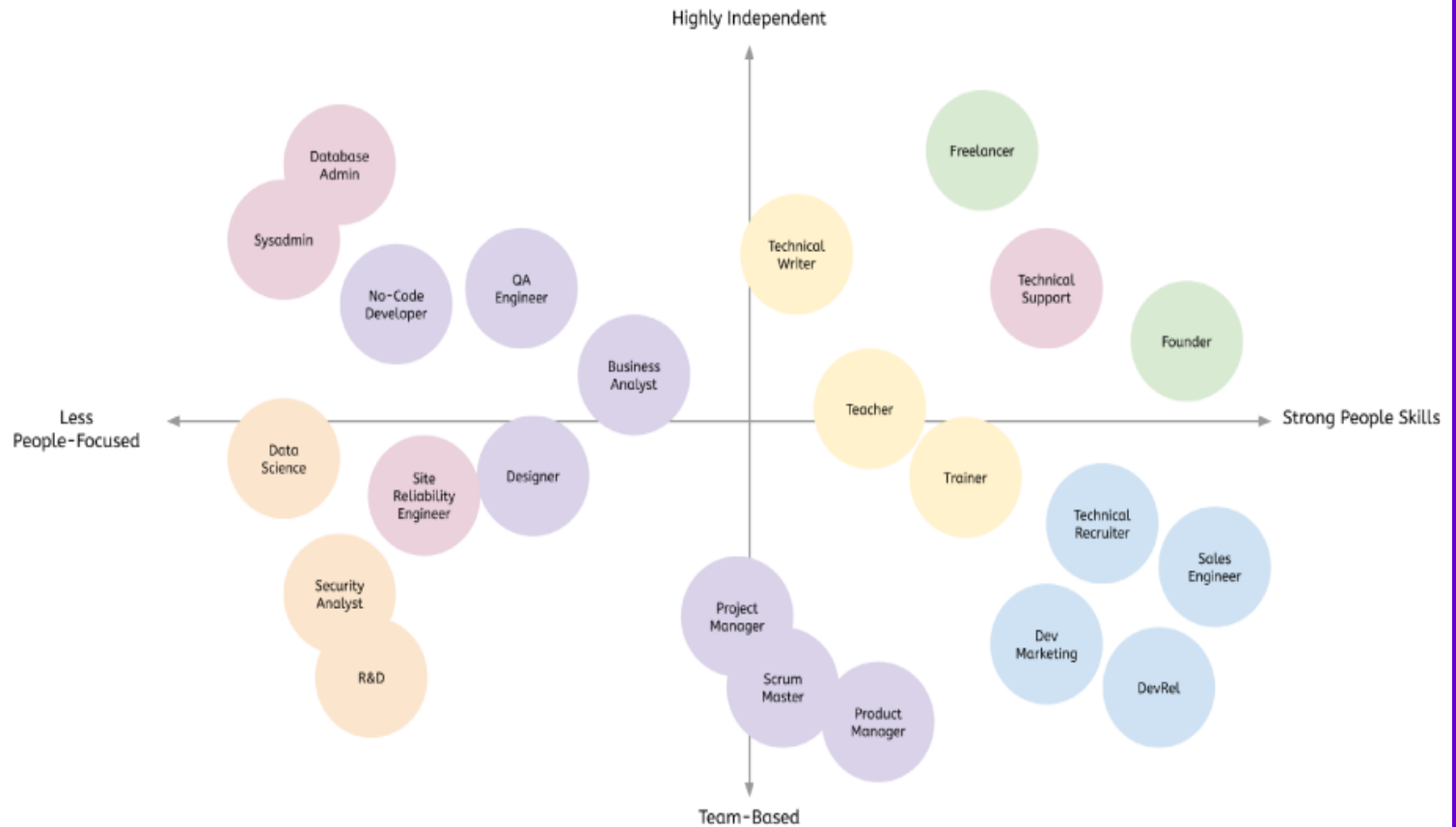
Your Personality  
Matters

You should know  
your self



How to choose our field  
(Your Personality  
matters)

## Independency Type And Skills Type

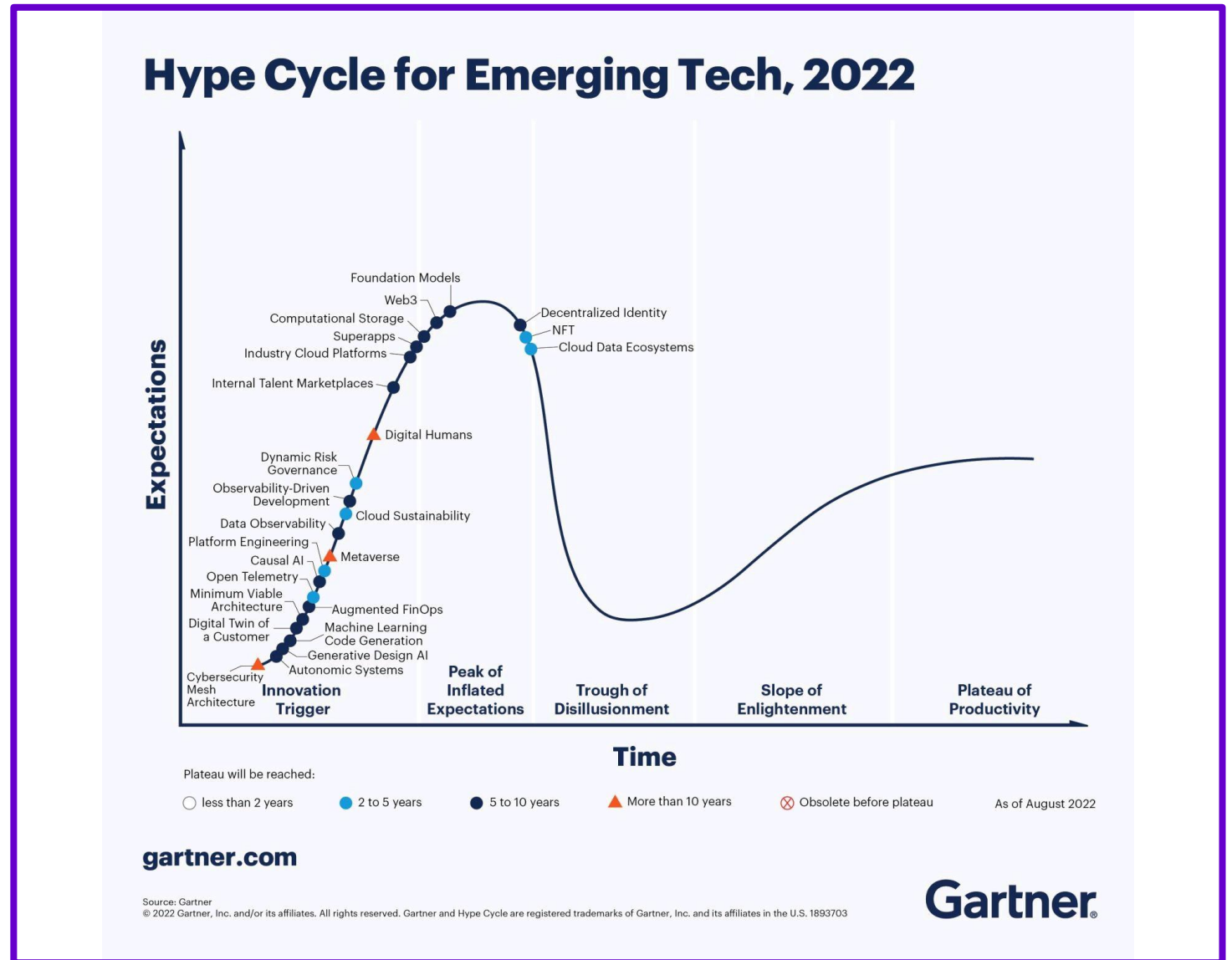


Source: <https://www.freecodecamp.org/news/alternative-career-paths/>

# 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!



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# 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



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**[github.com/Samanipour](https://github.com/Samanipour)**