

The background is a dark blue gradient with abstract, glowing blue lines and data points, suggesting a technical or scientific theme. A prominent white line graph with yellow circular markers is visible on the left side. The graph shows a downward trend followed by an upward trend. A data point on the upward trend is labeled with the value 289.33 in a glowing blue font. Other faint lines and data points are visible in the background, creating a sense of depth and complexity.

Intro to Computer Science Research

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Tactical Goals

Complete a State-of-the-Field Project

- At the end of the course: Paper, presentation, and dialogue on a topic:
 - Background content
 - Technical Analysis
 - Future Trends

Learn approaches for technical topic

- Finding content
- Collaborating
- Discussing
- Writing
- Presenting

Strategic Goals

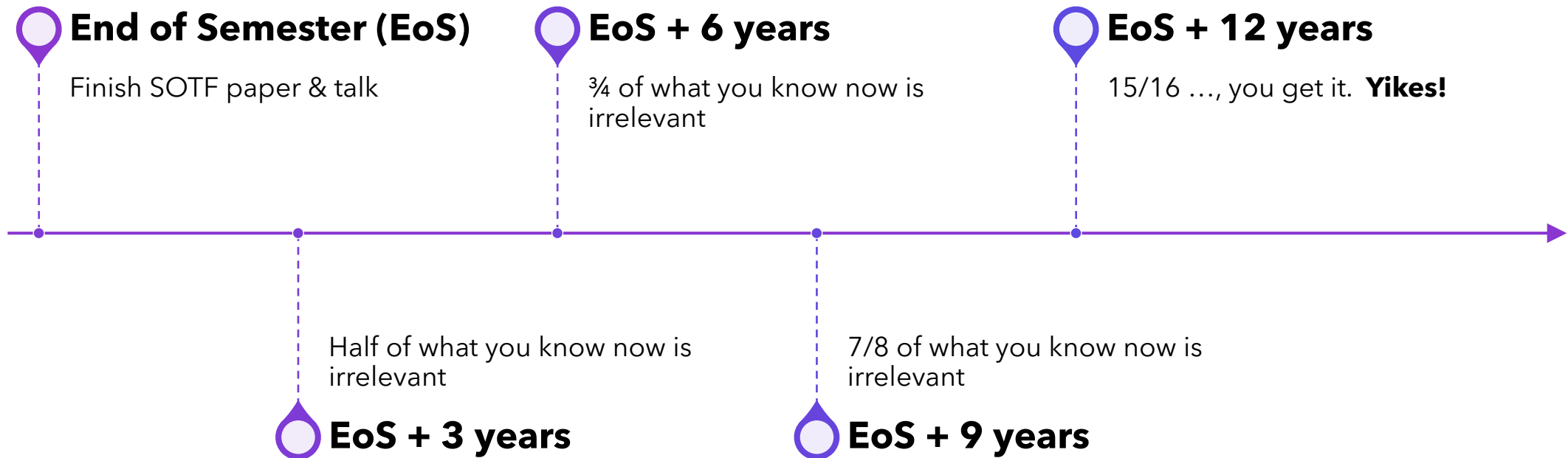
Prepare for professional computing life

- Sustained learning skills and habits
- Presence in the virtual world
- Collaborative approach to life

Cultivate a growth mindset

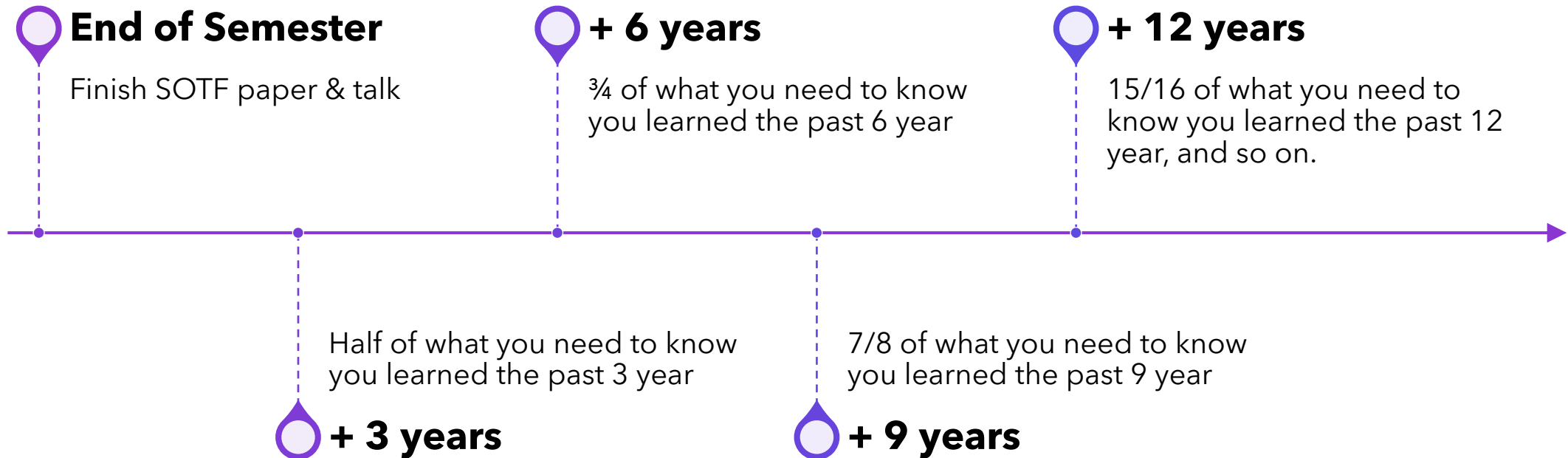
- Execute today's ideas & invest in new ideas
- Do today's job & prepare for next one
- Collaborate today with colleagues & increase your existing network

Timeline: CS Knowledge "half life"

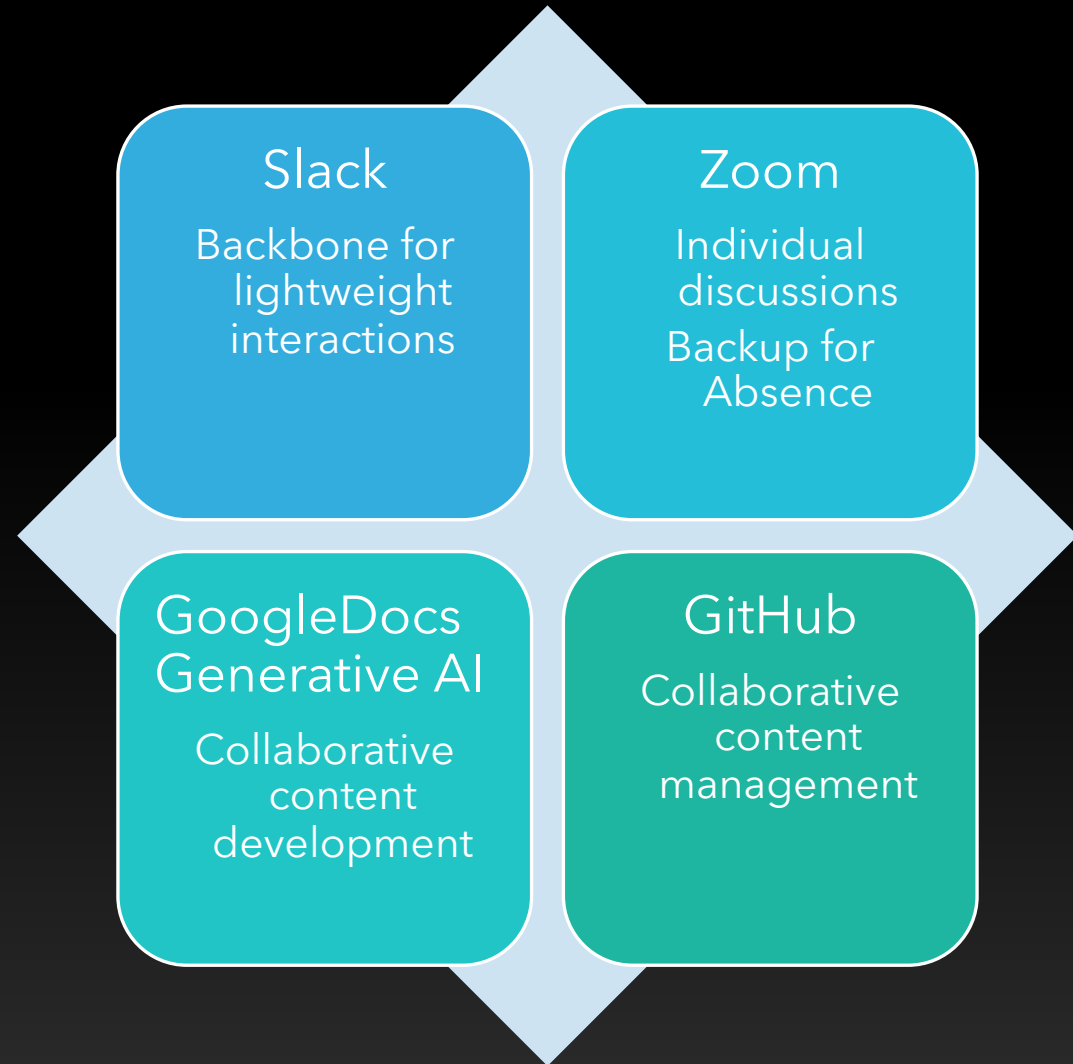


Without regular learning of new content, our skills diminish!
Rate of progress seems to be accelerating: 3 years -> 2, 1.5?

Timeline: CS Knowledge Growth



Communication tools



Slack: Creating persistent presence



Enables a virtual team room experience



Have it on your phone, desktop, tablet, Apple Watch



Monitor it regularly



Generative AI Tools

Exciting new frontier

We will embrace and explore the use of these tools!

Expectations

Keep strategic goals in mind

- Prepare for professional life
- Cultivate a growth mindset
- Our tactics can change

Be transparent

- Communicate to me and your team about opportunities, challenges
- Communicate early, when issues are just emerging and easier to address

Commit

- Stay focused
- Adapt as needed

Resources

<https://maherou.github.io/Teaching>

