

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 has four points, with the second point from the left being the lowest. A blue data point is also visible near the bottom center, with the value '289.33' next to it. The title 'Intro to Computer Science Research' is written in a large, white, sans-serif font on the right side of the image.

# Intro to Computer Science Research

MICHAEL A. HEROUX

# Tactical Goals

## Complete a State-of-the-Field Project

- At the end of the course: Paper, presentation, demo, 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

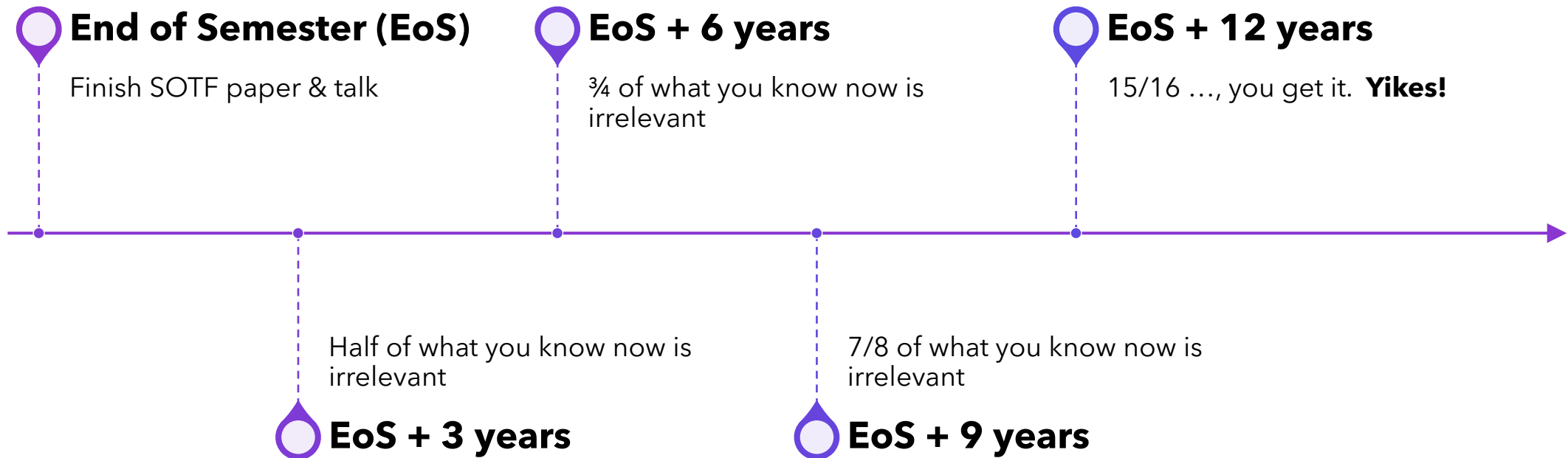
- Sustained learning skills and habits
- Presence in the virtual world
- Collaborative approach to life
- **I am ready for change**

## 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
- **I am a learner**

# Timeline: CS Knowledge "half life"

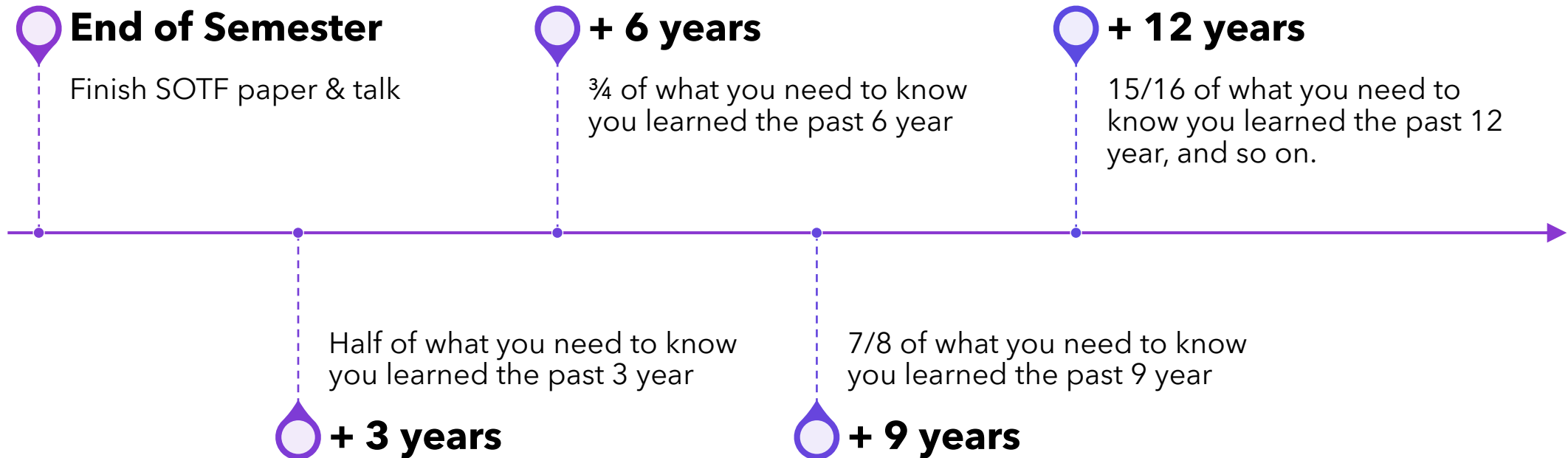
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Without regular learning of new content, our skills diminish!  
Rate of progress seems to be accelerating: 3 years -> 2, 1.5?

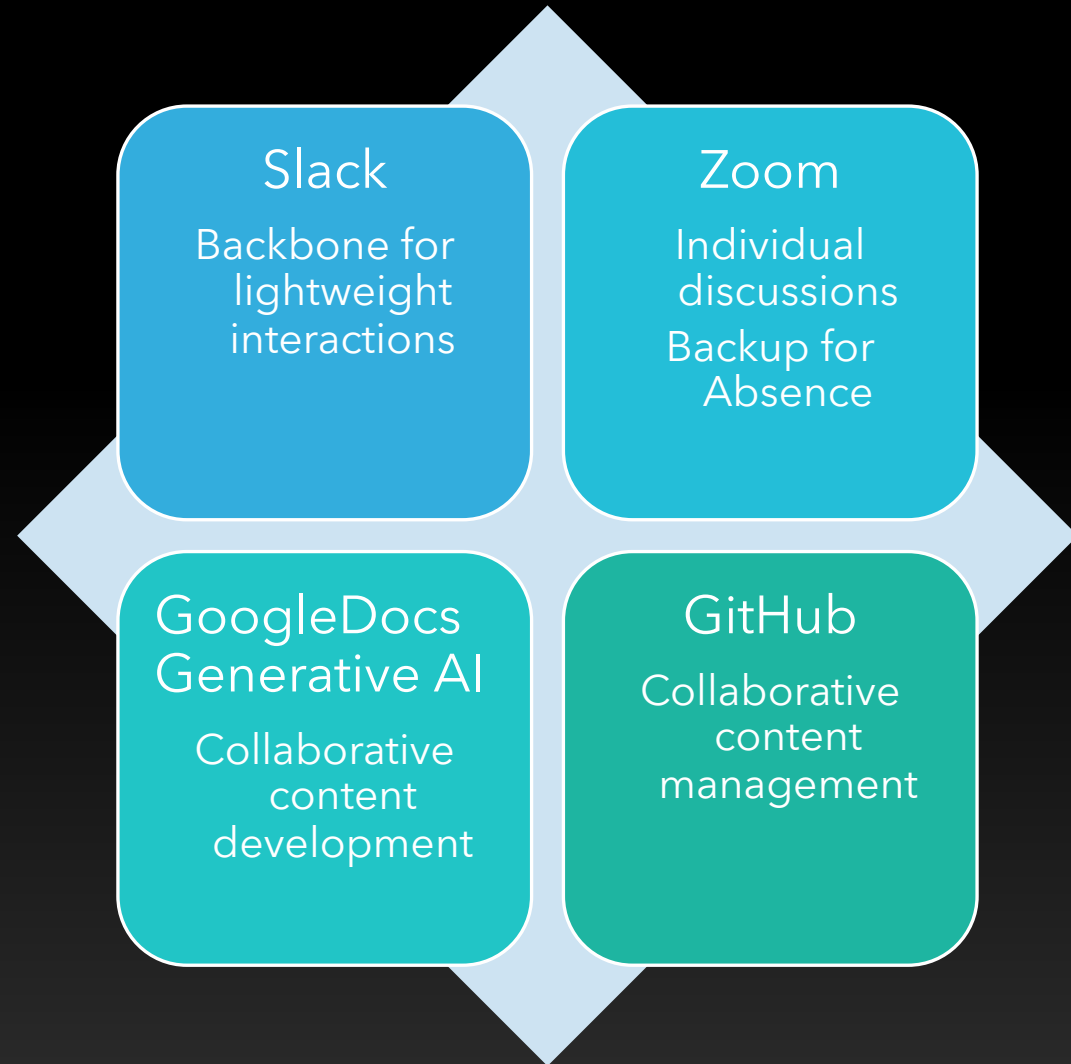
# Timeline: CS Knowledge Growth

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# Communication tools

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# 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

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Exciting new frontier

We will embrace and explore the use of these tools!

We have a [virtual CS373 instructor](https://chat.openai.com/g/g-0m35Mzndc-cs-capstone-course-companion)\*

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# Expectations

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Keep strategic goals in mind

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

Be transparent

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

Commit

- Stay focused
- Adapt as needed

# Resources

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

