

Entering an Exciting Career Era

With Samantha Coyle

Who am I?



Samantha Coyle

TXState 2020 Alumni

Identical twin

Cat mom (lol)

Software engineer @ Diagrid

Gopher & Open Sourcer

Soon-to-be author

Conference lover

Hard worker

Overview

Preparation for interviews

What I did & do to prepare

Landing the offer

Preparing for your first day

Learnings on the job

Conclusion

Preparation for interviews

Prepare to find an interview

Resume

Personal brand building

Networking

Social media: X, LinkedIn

Personal website

Github portfolio

Job / Career fairs

Get creative, and get out there!

How to Kick A** in the Interview

Class work

Do homework & readings

Find what works for your brain

Create a habit / schedule and stick to it

Find the resources that you like

Mock interviews & practice

Relax – there are many aspects to an interview 😊

What I did & do to prepare

How I prepared for interviews at TXST

Mock interviews

Practice everyday – schedule & routine is key

Know what algorithms/data structures, or things you struggle with and/or should prioritize for role

Manage time – prep on weekends too

Ask what to expect

Morning run & power pose before

Have back-pocket answers & elevator pitch ready!!

Do your research – company, interviewer, common questions, & role!

Review doc on past interview questions as needed

How I continue to prepare for interviews

Mock interviews

Practice everyday – schedule & routine is key

Know what algorithms/data structures, or things you struggle with and/or should prioritize for role

Manage time – prep on weekends too

Brush up on system design & considerations

Ask what to expect

Morning run & power pose before

Have back-pocket answers & elevator pitch ready!!

Do your research – company, interviewer, common questions, & role!

Review doc on past interview questions as needed

Leetcode Robot Mode

<https://seanprashad.com/leetcode-patterns/>

LEETCODE PATTERNS



Question List

Tips

Acknowledgements

Problems pattern frequency

Heap : 17 Greedy : 5 Binary Search : 1 Intervals : 1 QuickSelect : 1 Bucket Sort : 1

0 / 180

Reset

All

Questions



Solutions

Show/Hide Patterns



Difficulty

All

Companies ?

All



Kth Smallest Element in a Sorted Matrix



Binary Search

Heap

Medium



Find K Pairs with Smallest Sums



Heap

Medium



Meeting Rooms II



Heap

Intervals

Medium



Hackernoon 14 Patterns Article

<https://hackernoon.com/14-patterns-to-ace-any-coding-interview-question-c5bb3357f6ed>

1

1. Sliding Window

The Sliding Window pattern is used to perform a required operation on a specific window size of a given array or linked list, such as finding the longest subarray containing all 1s. Sliding Windows start from the 1st element and keep shifting right by one element and adjust the length of the window according to the problem that you are solving. In some cases, the window size remains constant and in other cases the sizes grows or shrinks.

2

Sliding window -->



3

Slide one element forward



4

Following are some ways you can identify that the given problem might require a sliding window:

- The problem input is a linear data structure such as a linked list, array, or string
 - You're asked to find the longest/shortest substring, subarray, or a desired value
- Common problems you use the sliding window pattern with:

- Maximum sum subarray of size 'K' (easy)
- Longest substring with 'K' distinct characters (medium)
- String anagrams (hard)

Coding Patterns Blog for More Details

<https://emre.me/categories/#coding-patterns>

coding-patterns

Coding Patterns: Longest Common Substring/Subsequence (DP).

🕒 8 minute read

In Coding Patterns series, we will try to recognize common patterns underlying behind each algorithm question, using real examples from Leetcode.

Coding Patterns: Palindromes (DP).

🕒 9 minute read

In Coding Patterns series, we will try to recognize common patterns underlying behind each algorithm question, using real examples from Leetcode.

Coding Patterns: Staircase (DP).

🕒 9 minute read

In Coding Patterns series, we will try to recognize common patterns underlying behind each algorithm question, using real examples from Leetcode.

Coding Patterns Blog for More Details

<https://emre.me/categories/#coding-patterns>



Emre Bolat

Software Architect

Follow

Coding Patterns: Fast & Slow Pointers

🕒 10 minute read

On this page

Problem: Linked List Cycle

Fast & Slow Pointers Solution

Problem: Linked List Cycle II

Fast & Slow Pointers Solution

How to identify?

Similar LeetCode Problems

In [Coding Patterns](#) series, we will try to *recognize* common patterns *underlying* behind each algorithm question, using real examples from [Leetcode](#).

Previous posts were about [Sliding Window](#) and [Two Pointers](#) patterns and today, we will introduce [Fast & Slow Pointers](#)

Landing the offer

Levels FYI

<https://www.levels.fyi/>

levels.fyi

Search by Company, Title, or City

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Get Paid, Not Played!

Risk-Free Offer Negotiation

\$40k

S +\$75k

🎵 +\$37k

🌐 +\$34k

🍀 +\$10k

Increase Your Offer

Software Engineer

Product Manager

Product Designer

Software Engineering Manager

Management Consultant

Software Engineer Salaries

Now

+ Add Your Salary

a minute ago

Fidelity Investments

\$92,500

Boston, MA

Promoted

Hightouch

\$170k - \$240k

+Equity

Apply

a minute ago

Tesla

\$115,000

Fremont, CA

3 minutes ago

Google

\$445,000

San Francisco

5 minutes ago

Amazon

\$179,433

Seattle, WA

View All

Software Engineer Levels

Amazon

Google

Microsoft

Facebook

Apple

More

USAA

H-E-B

Accenture

Software Engineer III

Software Engineer II

Software Engineer I

Software Engineer 1

Software Engineer 2

Associate Software Engineer ASE

Software Engineer Analyst SE

Offer Stages

Meet with higher ups / HR again

Be flexible

Always be mindful of timing, especially if need to give notice

Art to being desirable with some pressure on both sides

Follow up to express interest

Aim high & negotiate as needed while considering offer in its entirety

If you don't ask, you won't get it

Consider tech stack, culture & role responsibilities

Say YES eventually!

Preparing for your 1st day

You got the job, now what?

Enjoy & celebrate

Give yourself that time to enjoy your accomplishment

Set up laptop

Peacefully prepare at your own pace & timeline

Public announcement

Learnings on the Job

What to expect on the job socially?

Second guessing on things until you're comfortable & confident

Finding your buddy, and stick to them – work bff maybe!

New team norms

Team collaboration

Asynchronous communication probably often

Set a balance for yourself on communications outside of work

Advocating for yourself & your accomplishments – keep track of what you do!!!!

Video on 😊

Personal Ex's of What I've Learned Socially

Not everyone is going to like you, and vice-versa

Bring others up with you, NOT the other way around

Be strategic on growing relationships tastefully

Consider what you want to be known for – pillars

Positive communication

Take time off & for yourself

Make suggestions to management

Have a good relationship & be prepared for 1:1s, especially manager 1:1s

What to expect on the job technically?

Many learnings while navigating uncharted territory

Growing pains

Learning what you like and don't like

Not just 40 hours a week every week

Software imperfections 😊

Sometimes more stress/pressure

Big wins & small wins, but oftentimes slow & steady wins the race

Personal Ex's of What I've Learned Technically

There are some things you have to do in your free time

Need more security & scalability knowledge for more senior roles

Don't always be quiet in meetings

Come prepared to meetings

People love Proof of Concepts, especially to advocate your ideas

Things 99% of the time take longer than what you anticipate, allow buffer time

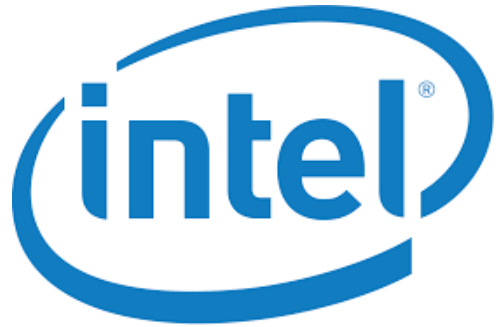
It's okay to say "IDK", *but* then go do your research

Identify knowledge gaps asap & fill in free time

Some tech debt can be okay, or even good

Don't pull all nighters

Recognize that each role can vary

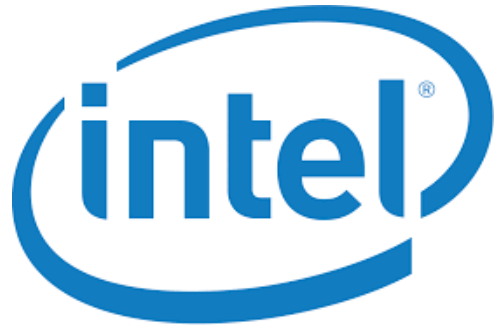


Computer Vision
Internet of Things
Edge-based applications
Reference Implementations
Ample time
Less stress



Distributed systems
Software for other developers
Cloud-native all the way
Production grade
Go, go, go all the time
More stress

Recognize that each role can vary



Computer Vision
Internet of Things
Edge-based applications
Reference Implementations
Ample time
Less stress



Build on existing
knowledge
Grow on new fronts
Always be intentional &
picky
Align with career goals

Distributed systems
Software for other developers
Cloud-native all the way
Production grade
Go, go, go all the time
More stress

Individual experiences can vary too



SAM

Dark office in restricted area

Close with 1 team member

Did not like what I did with 1st team

Switched teams

Went from Windows scripting with older technology -> fun Kubernetes & cloud-native tasks in Go.

CASSIE

Birds nest office with perks

Loved her manager & team

Loved every aspect of her tasks

Stayed on same team entire time

Had fun Kubernetes & cloud-native tasks in Go the entire time.



Individual experiences can vary too

SAM



CASSIE

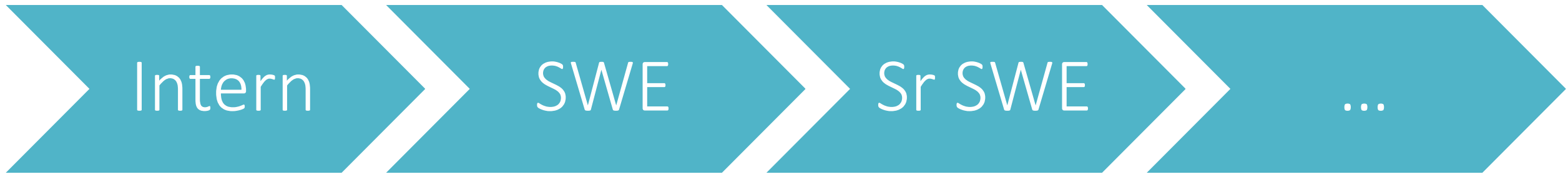
Dark office in restricted area
Close with 1 team member
Did not like what I did with 1st team
Switched teams
Went from Windows scripting with older technology -> fun Kubernetes & cloud-native tasks in Go.

Always pros/cons
Learn likes/dislikes
Give things time
Use support system

Be strong enough to
make a change if
needed

Birds nest office with perks
Loved her manager & team
Loved every aspect of her tasks
Stayed on same team entire time
Had fun Kubernetes & cloud-native tasks in Go the entire time.

Different learnings in different stages, with overlap



Different learnings in different stages, with overlap



There is so much more to SWE than
just software

Curveballs will happen

You can't always prepare for everything life / your job throw at you

Potential relocation – Ireland & Arizona

Random doors may open, so take thought-through chances – Diagrid

Layoffs can happen – Cassie

Extreme stress while working – family illness, cry in front of CTO

Some curveballs are good and put you on the path you were supposed to be on, not the one you thought you should be on or wanted

Overcoming challenges

Have to work with people, products, and/or tools you may not like

Always be positive & mentally tough

Always be respectful & resilient

Don't be tooooooo hard on yourself – slow & steady wins the race

Figure out when it is healthy / best to make a change and/or leave

Lean on your support system

Always do your best

Don't stick around somewhere for the fear of the unknown

Money management & investing

It would be irresponsible to not be smart when it comes to money in our field

I'm not a financial advisor, so take with grain of salt!

HSA > FSA

IRAs & 401ks

Figure out what works for you for long term & hold VS leveraging your stocks

Take your time & do your research

Diversify

Don't be too flashy & make hasty decision when buying

Conclusion

Enjoy the journey

Consider open doors always

There is no golden ticket / answer in life

We're all just figuring it out as we go

Keep learning & growing while still trying
to live life to the fullest



How I enjoy the journey



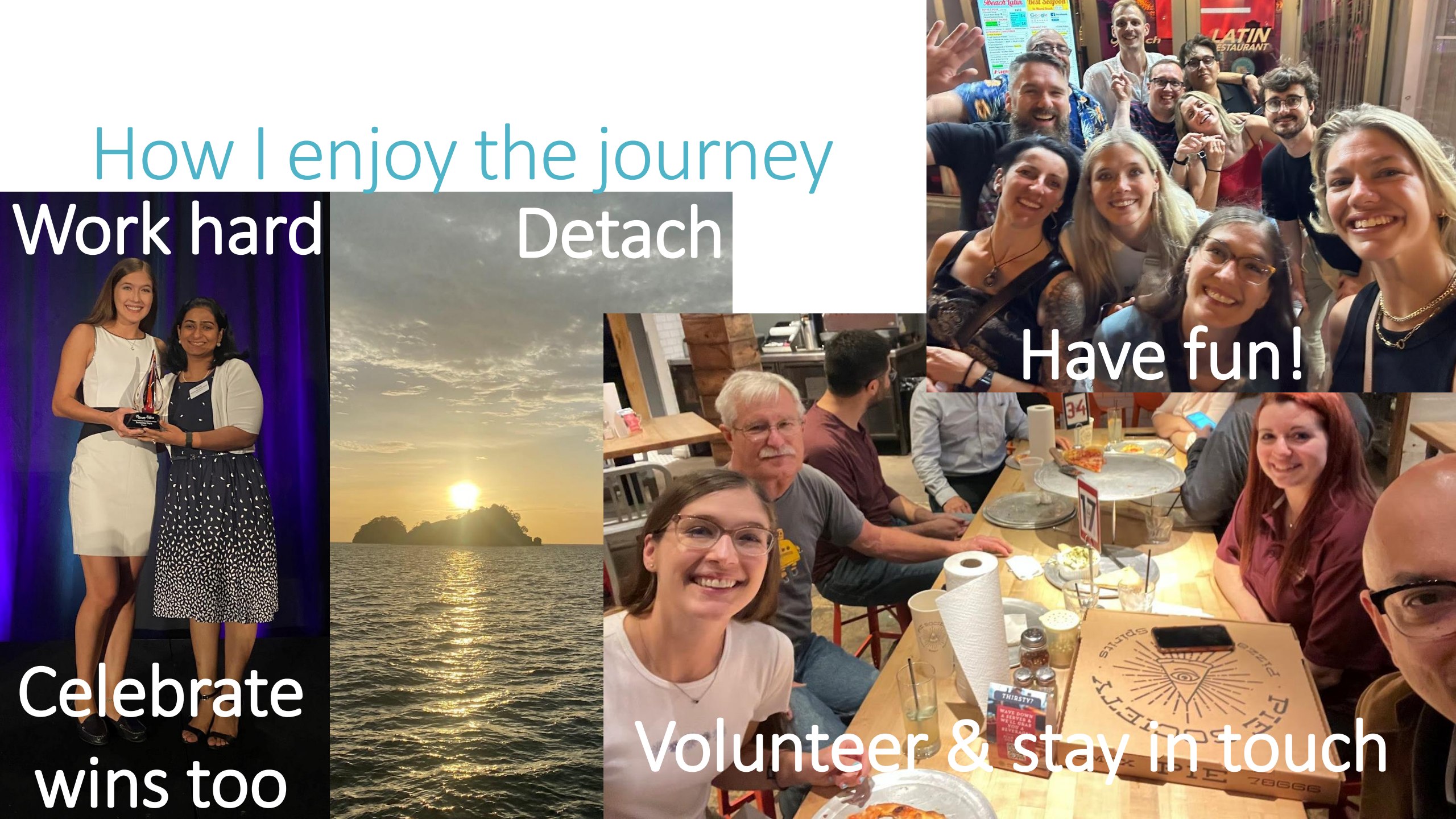
How I enjoy the journey

Work hard

Detach

Have fun!

Celebrate
wins too



Last tips & tricks

Find a mentor & support system

Matthew principle

Me VS Me mentality

Fully committing to the profession means some sacrifice

There is no even split of 9-5 work, rest is my time - the lines blur easily

Decide where you want to go & be strategic to get there always!!!!

Be as mentally strong as you can be & find resources when needed

Consider:

- What goal do you have for yourself right now?

- What goal do you have for yourself in Greg's class?