

Close your eyes.

**Who were you 4 years
ago?**

Thank your past self.

**Imagine 4 years from
now.**

**Who didn't have a clear
vision?**

Four Years Ago



Maggie Oates

@oatesmeal

wolfram alpha pro 4 christmas? career life goals in order:

1. work for NASA
2. work for Wolfram
3. idec anywhere w enough \$\$\$\$ for pizzas

4:15 AM - 17 Dec 2014

4 Likes



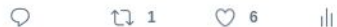
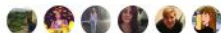
Maggie Oates

@oatesmeal

waiting patiently for the day I become an animorph

5:22 AM - 3 Nov 2014

1 Retweet 6 Likes



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Maggie Oates

@oatesmeal

life goal: be a model for those 90s candy necklaces

12:50 AM - 16 Oct 2014

4 Likes



Add another Tweet

Four
Years
Ago



Maggie Oates





2014
Gay marriage
campaign



Industry
internship



First
publication,
Best Paper
Award!

2013
Computer
Science
& Linguistics

2015
Went to Hello
Research!

2015
Undergrad
Research



2016
Summer
Robotics
Research

Apply to
grad
school

Graduate!

PhD at
Carnegie
Mellon



2014
Gay marriage
campaign



First
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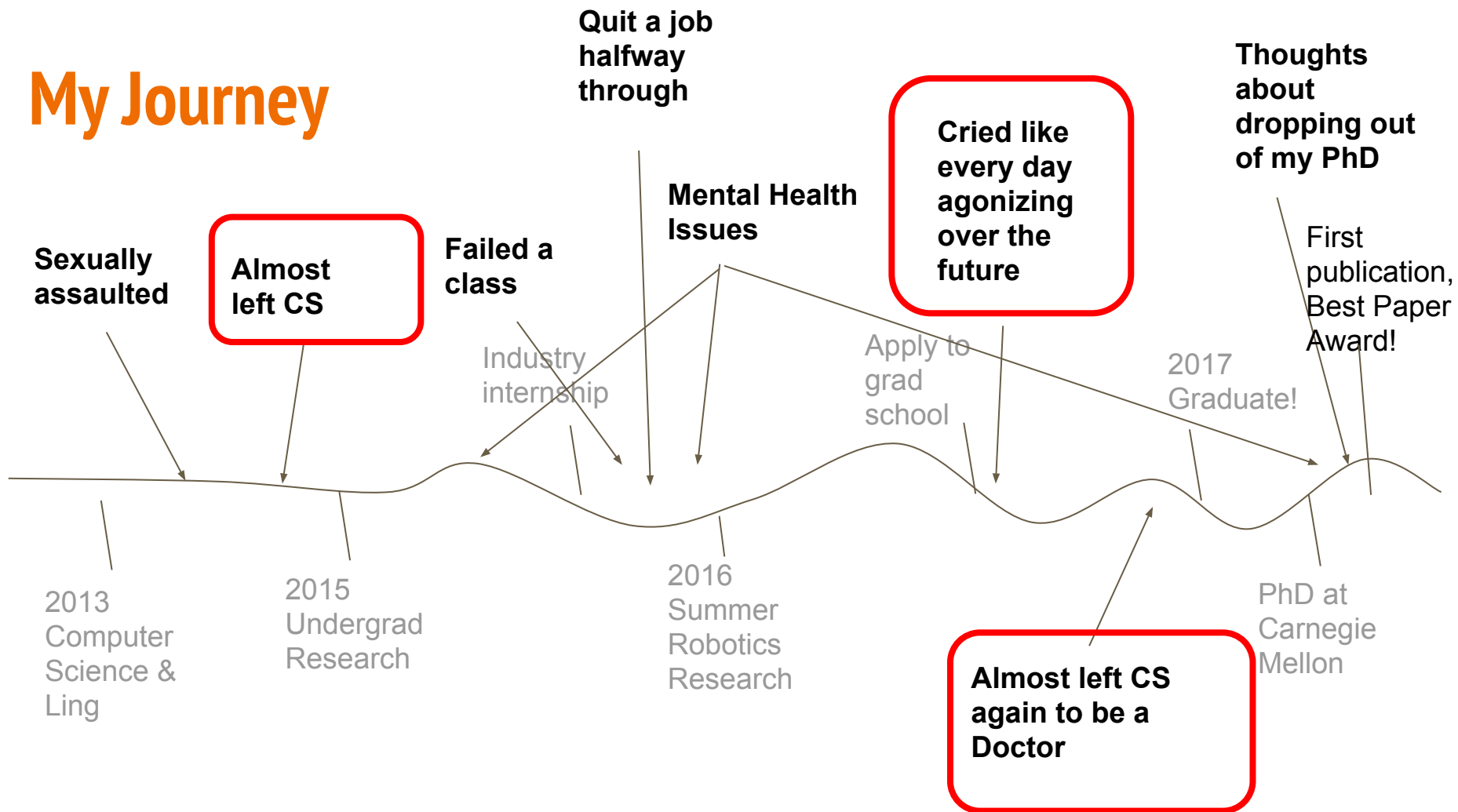
2013
Computer
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Research!

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Mellon

My Journey



A Beautiful Curse: Everything & Nothing is Interesting

Maggie Oates, Hello Research (OURCS) 2018, Bloomington, IN

Ignore this if....

- You feel certain about your future
- You have a vision
- You're a decision scientist
- You don't consider yourself analytically-minded
- You're focused on just surviving right now

“Don’t worry, you’ll figure it out.”

Sure, but how?

“I saw my life branching out before me like the green fig tree in the story. From the tip of every branch, like a fat purple fig, a wonderful future beckoned and winked.

One fig was a husband and a happy home and children, and another fig was a famous poet and another fig was a brilliant professorand beyond and above these figs were many more figs I couldn't quite make out. **I saw myself sitting in the crotch of this fig tree, starving to death, just because I couldn't make up my mind which of the figs I would choose. I wanted each and every one of them, but choosing one meant losing all the rest, and, as I sat there, unable to decide, the figs began to wrinkle and go black, and, one by one, they plopped to the ground at my feet.”**

-Sylvia Plath, *The Bell Jar*

H1: It's actually pretty hard to ruin everything.



H1: It's actually pretty hard to ruin everything.

Action: Find the worst risks. Could this fig result in...

- Death
- Illegal activity without reason
- Deep social injustice
- Needlessly ruined relationships
- Inescapable unhappiness
- Betraying your own beliefs
- Deep debt (not that bad)

H1: It's actually pretty hard to ruin everything.

Action: Dream up some contingency plans

“If going to grad school makes me unhappy, I will drop out and work at a coffee shop.”

“If I am forced to work on a project that I later feel betrays my own beliefs, then I will devote as many years as necessary to amend that contradiction. I will forgive myself.”

H1: It's actually pretty hard to ruin everything.

Sylvia Plath was wrong about:

“...choosing one [fig] meant losing all the rest”

Most branches you can backtrack.

H2: Reduce uncertainty.

Action 1: Start with what you know.

Known (80+% confidence)	Salience
<ul style="list-style-type: none">• I enjoy having a baseline financial quality of life, but don't need a lot of money• My values conflict with contributing to military or surveillance work• I am fulfilled by mission-driven work• Being the only woman makes me unhappy• I dislike working late• My interests change often & I am happy when I'm focusing on them• I need some structure and oversight to be productive	<div>5</div> <div>9</div> <div>7</div> <div>3</div> <div>5</div> <div>7</div> <div>5</div>

H2: Reduce uncertainty.

Action 1: Start with what you know.

Known (80+% confidence)

Ok if things conflict! You're allowed to be complicated

I enjoy having a baseline financial quality of life, but don't need a lot of money

My values conflict with contributing to military or surveillance work

I am fulfilled by mission-driven work

- Being the only woman makes me unhappy
- I dislike working late
- My interests change often & I am happy when I'm focusing on the
- I need some structure and oversight to be productive

I am fulfilled by...
I value...
I dislike...
I need...
I am proud of...
X makes me feel...

5

9

7

3

This can be a really painful process!

Be specific!

No skills allowed!
~~"I am good at writing."~~
~~"I would be a good high school teacher."~~

H2: Reduce uncertainty.

Action 2: Write down your idks & ignore them

idks (0-20% confidence)

- I want to go to grad school
- I want to run a startup
- I enjoy living in California
- I need a PhD to accomplish my goals in life
- I will feel regret if I do [X]

It's too difficult or impossible to increase your certainty in the short term.

H2: Reduce uncertainty.

Action 3: What figs can you eliminate?

Known (80+% confidence)

- I enjoy having a baseline financial quality of life, but don't need a lot of money
- My values conflict with contributing to military or surveillance work
- I am fulfilled by mission-driven work
- → Being the only woman makes me unhappy
- I dislike working late
- My interests change often
- → I need some structure and oversight to be productive
- I don't like moving

Removes a lot of companies.

I need a place with flexibility

Narrows down my options in Robotics

No early-stage startups

H2: Reduce uncertainty.

Action 4: Formalize the uncertainty

Hypotheses (50-80% confidence)	Suspitions & Daydreams (20-50% confidence)
<ul style="list-style-type: none">● A lot of tech is conceptually cool, but boring in practice (e.g., Machine Learning).● I am fulfilled by building systems.● I want to work in DC doing policy.● I don't want to be a full professor.● I like teaching & helping others learn.● I want a kid someday; I want to be financially stable by that point.● I am fulfilled by topic more than technique.● I am happy & productive when working on teams.	<ul style="list-style-type: none">● Traveling the world is fun.● God exists.● I don't want to run for office.● I don't want to live far away from my family.● Working far out of my area of expertise makes me feel lost rather than challenged.

H2: Reduce uncertainty.

Action 4A: Identify places to reduce uncertainty

Hypotheses (50-80% confidence)	Suspicions & Daydreams (20-50% confidence)
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H2: Reduce uncertainty.

Action 5: Gather Information or Experience

- Try it out.
 - Go to a conference
 - Take an internship
 - Do a weekend hackathon
- Read.
- Observe. (Are the grad students happy?)
- Ask others.
 - What would you do & why? (make them give you an answer)
 - What factors helped you make your decision?

H2: Reduce uncertainty.

Variations

- Rating and ordering
- Environmental uncertainty vs internal uncertainty

H3: Decide later, but avoid paralysis.

Do I really need to answer this now?

Pause to gather information & experience, but keep momentum.

Keep your options open, but not forever.

H4: Flip a coin.

Follow your gut.

Literally flip a coin.

Follow social norms.

Follow someone else's
vision.



H1: It's actually pretty hard to mess up.

H2: Reduce uncertainty.

H3: Decide later, but avoid paralysis.

H4: Flip a coin.

Why did I go to grad school?

- Need for current flexibility
- Need for future flexibility
- Alignment of many of my values
- Alignment of some of my skills
- I didn't see a company that was a good fit
- I didn't want to study for technical interviews
- I got in?

"The last thing I wanted was infinite security and to be the place an arrow shoots off from. I wanted change and excitement and to shoot off in all directions myself, like the colored arrows from a Fourth of July rocket."

-Sylvia Plath

- I'm sorry, usually I attribute pictures; I didn't leave myself time.
- Maggie Oates, @oatesmeal