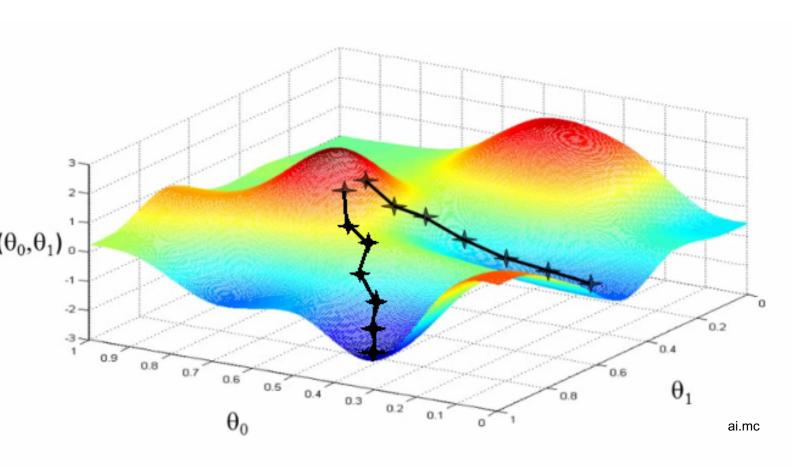
Search optimization—for your career!



ECML-PKDD PhD Forum 2020

Kuan-lin Huang Icahn School of Medicine at Mount Sinai New York City, USA





The "closest thing Silicon Valley has to a conscience."

—The Atlantic

The 3 stages of search optimization

Definition

What is your cost function?

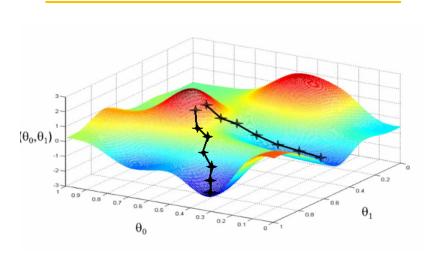
ion Ex

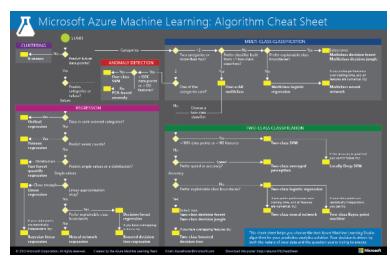
How do you optimize?

Execution

Fulfillment

How is your experience?







The 3 stages of search optimization

Definition

What is your cost function?

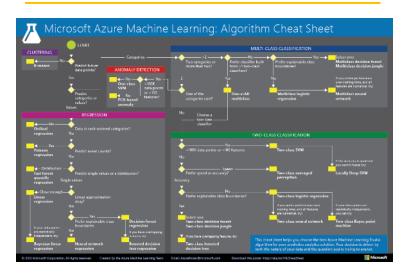
→ Your WHY

$\{\theta_0,\theta_1\}$ θ_0 θ_0 θ_1 θ_0 θ_1 θ_0 θ_1 θ_0 θ_0 θ_1 θ_0 θ_1 θ_0 θ_1 θ_0 θ_1 θ_1 θ_1 θ_1 θ_1 θ_1 θ_1 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_1 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_1 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_1 θ_2 θ_2 θ_2 θ_3 θ_4 θ_2 θ_1 θ_2 θ_3 θ_4 θ_2 θ_3 θ_4 θ_2 θ_3 θ_4 θ_3 θ_4 θ_3 θ_4 θ_4 θ_3 θ_4 θ_4 θ_4 θ_4 θ_4 θ_4 θ_5 θ_4 θ_5 θ_4 θ_5 θ_5

Execution

How do you optimize?

→ Your HOW



Fulfillment

How is your experience?

→ Your STORY



Long-term vs short-term consideration

Definition x Exploration

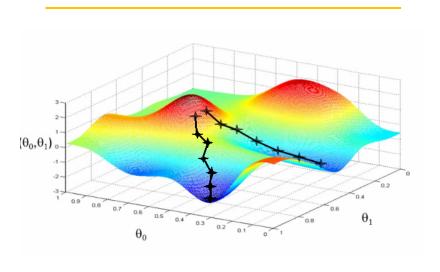
→ Your WHY

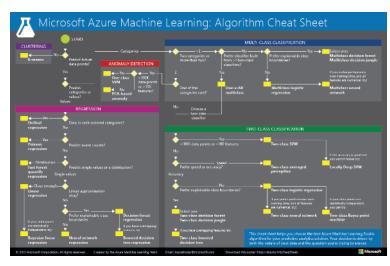
Execution x Decision

→ Your HOW

Fulfillment

→ Your STORY





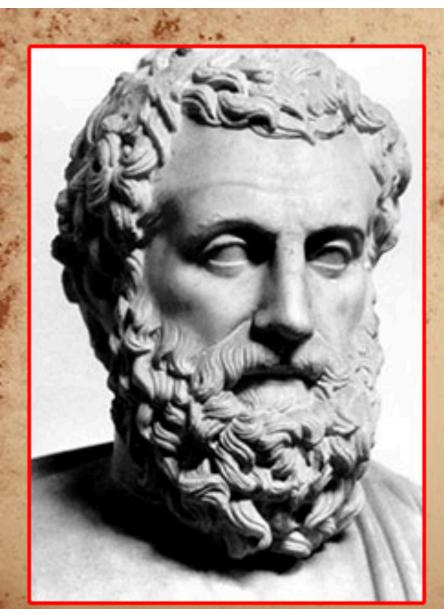


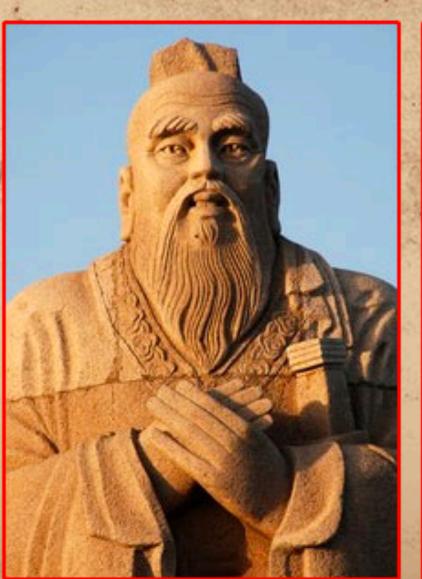
Ten Simple Rules for landing on the right job after your PhD or postdoc *Huang 2020, PLoS Comp Bio.*

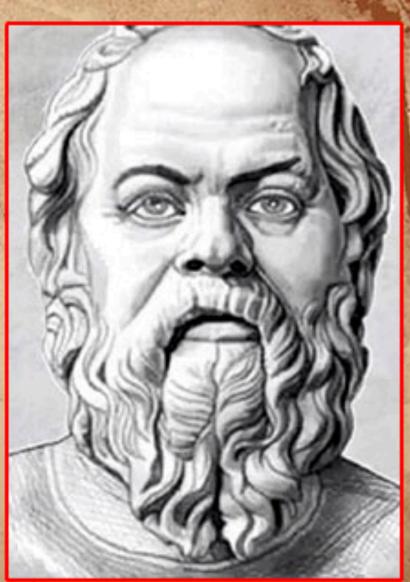
Definition

What is your purpose?

What are we here for?







- 1. Time-travel
- 2. Hedgehog concept—for yourself
- 3. Day-to-day passion

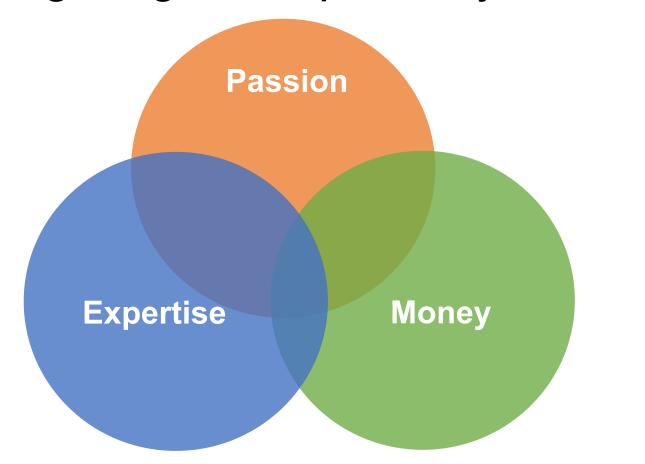


"I wish I'd had the courage to live a life true to myself, not the life others expected of me."

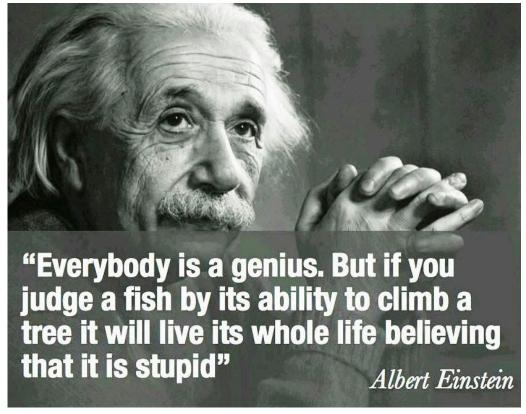
—the #1 regrets of the dying, according to Bronnie Ware, *The Top Five Regrets of the Dying*

- 1. Time-travel
 - Your deathbed: write your eulogy
 - Your childhood: what did you dream of becoming?
 - 5 & 15 years into the job

2. Hedgehog concept—for yourself



- 3. Day-to-day: which processes drive you?
 - Coding
 - Reading & writing
 - Projects & meeting



More ways to explore your purpose & interest

- 1. Talk to others in all fields
- 2. Gather the data, aka READ and GOOGLE
- 3. Conduct mini-experiments

Talk to others

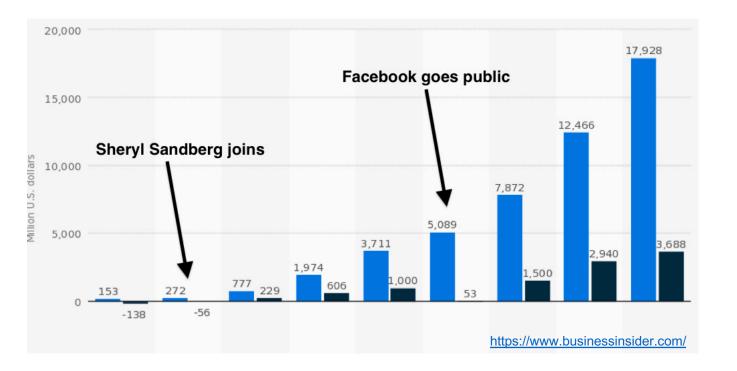
- 1. Which people's career do you aspire to?
- 2. Connect with alumni (ex. through career center)
- 3. Talk to people who have the job you're interested in

Gather the data

- 1. Lifestyle & career optimization books & podcasts
 - Tim Ferriss, Cal Newport, etc.
- 2. Read across fields
- 3. Job search/review sites

Conduct min-experiments

- 1. Classes outside of your field
- 2. Student group projects
 - Consulting, policy fellowship, incubators
- 3. Internships





LEAN IN

WOMEN, WORK, AND THE WILL TO LEAD

SHERYL SANDBERG

COO of FACEBOOK

"The business manual of the year" The Times

Execution

How do you optimize?

How do you optimize?

- 1. Find your tribe
- 2. The 5 people around you
- 3. Timeline
- 4. Location



Finding your tribe

Organization YOU

Mission ←→ Life goal

Culture ←→ Personality

Need ←→ Expertise

The people around you and role-models



wiktionary.org

Timeline

- 1. Long-term: you can have multiple careers
- 2. Short-term: plan it out!

Location, location, location





Fulfillment

How is your experience?

What is your life?

- 1. Challenge & Growth
- 2. Bonds & Relationship
- 3. Your STORY



"I just broke the internet."

Dan Kaminsky



Questions?



ComputationalOmicsLab.org

