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# SECURING A **BAD** CAREER IN PH.D. PROGRAM

**3 bad tips for Ph.D. students**

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Chang Lou, UVA CS Research Symposium 2024

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# OVERVIEW

- My research area: **failures** in cloud systems and data centers
  - Conducted empirical studies to understand why systems fail
  
- Similarly, we applied this methodology to understand **grad school**
  - What are some common pitfalls for Ph.D. students?
  - Observations made on past experience



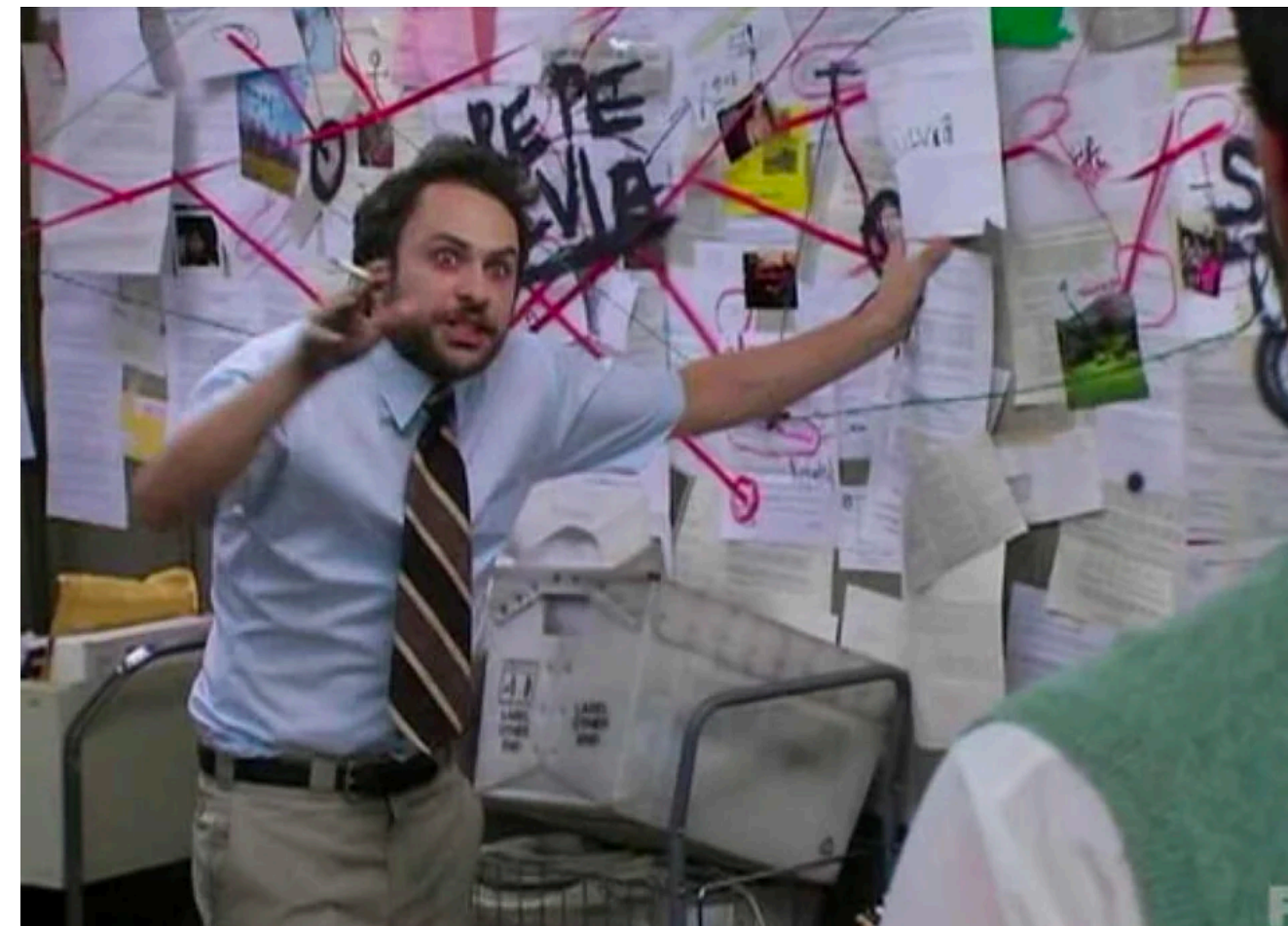
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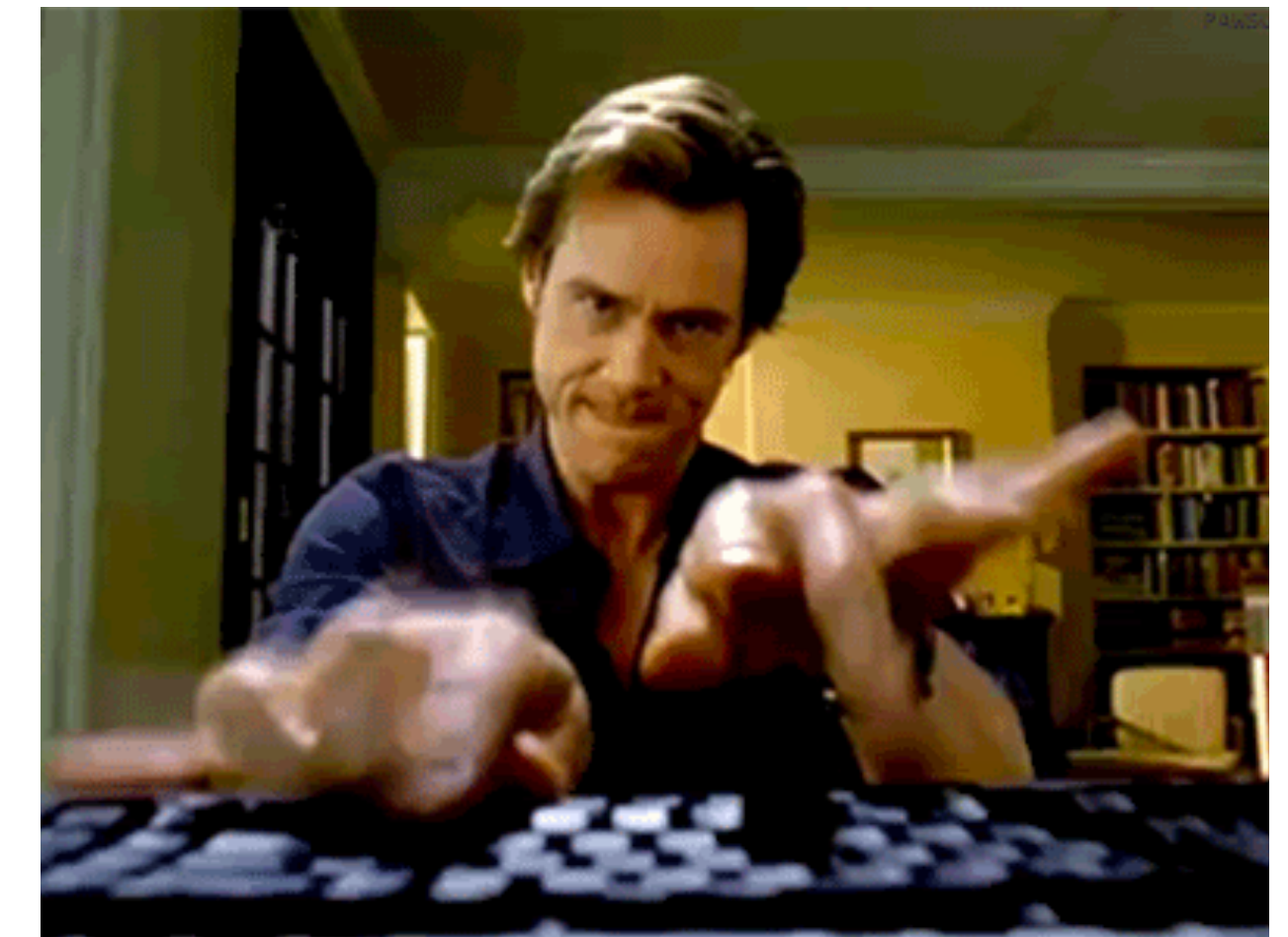
# OVERVIEW



Advising Relations



Time Management



Work-life Balance

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# HOW DO YOU VIEW YOUR ADVISOR?



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# **BAD** TIP 1.1: ADVISOR IS YOUR MANAGER

## – Principle: show your capability from independence

- Never ask help from your advisor
- If they don't reach out, you shouldn't
- It is fine to ignore their advice



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# **BAD** TIP 1.2: ADVISOR IS THE ORACLE

- **Principle: just wait to be spoon-fed**
  - Advisor is always right, follow each concrete instruction precisely
- **Never disagree with your advisor**
  - It is disrespectful and you will be kicked out of school

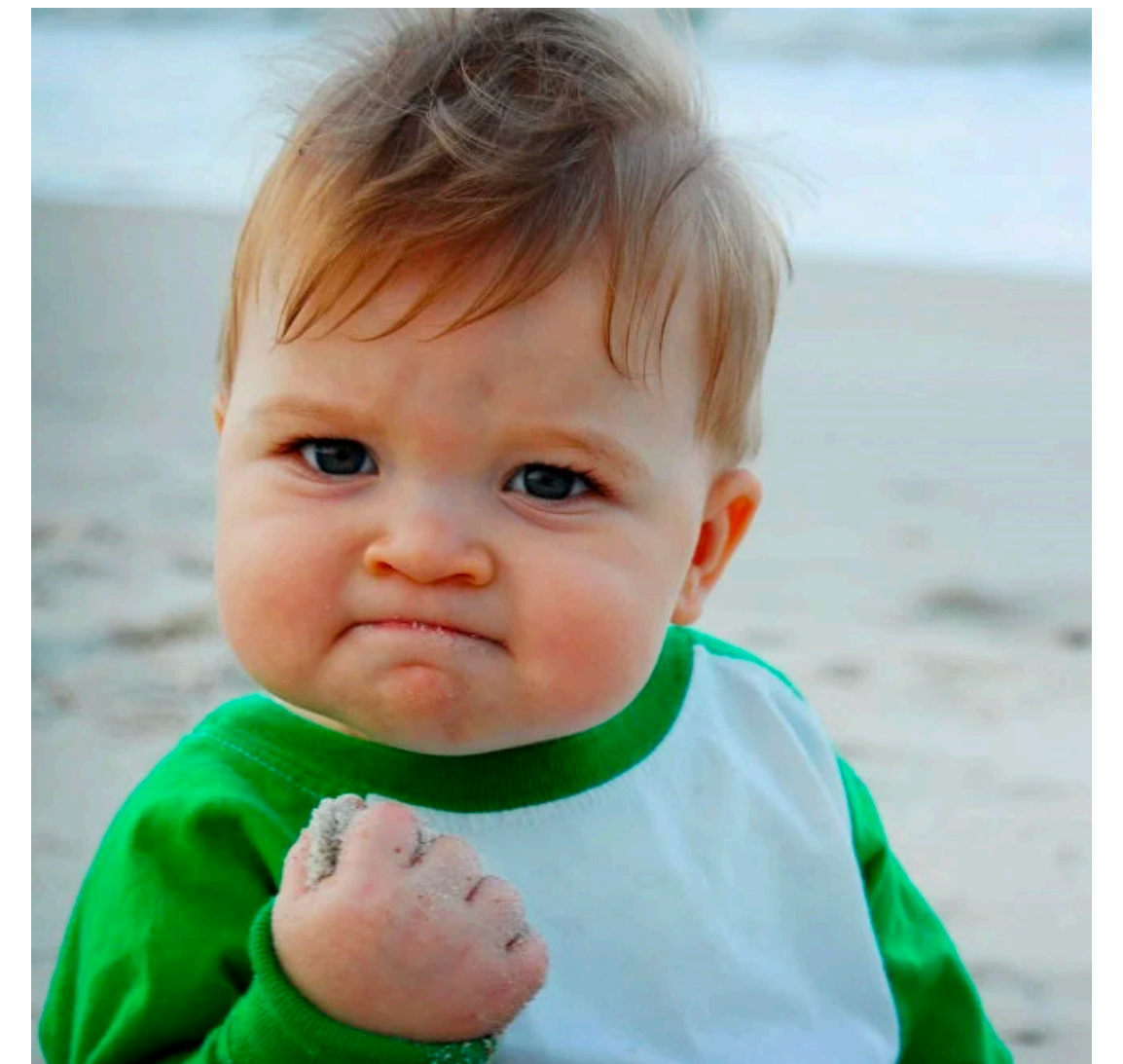


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# **GOOD TIP 1: ADVISOR IS YOUR VALUABLE RESOURCE**

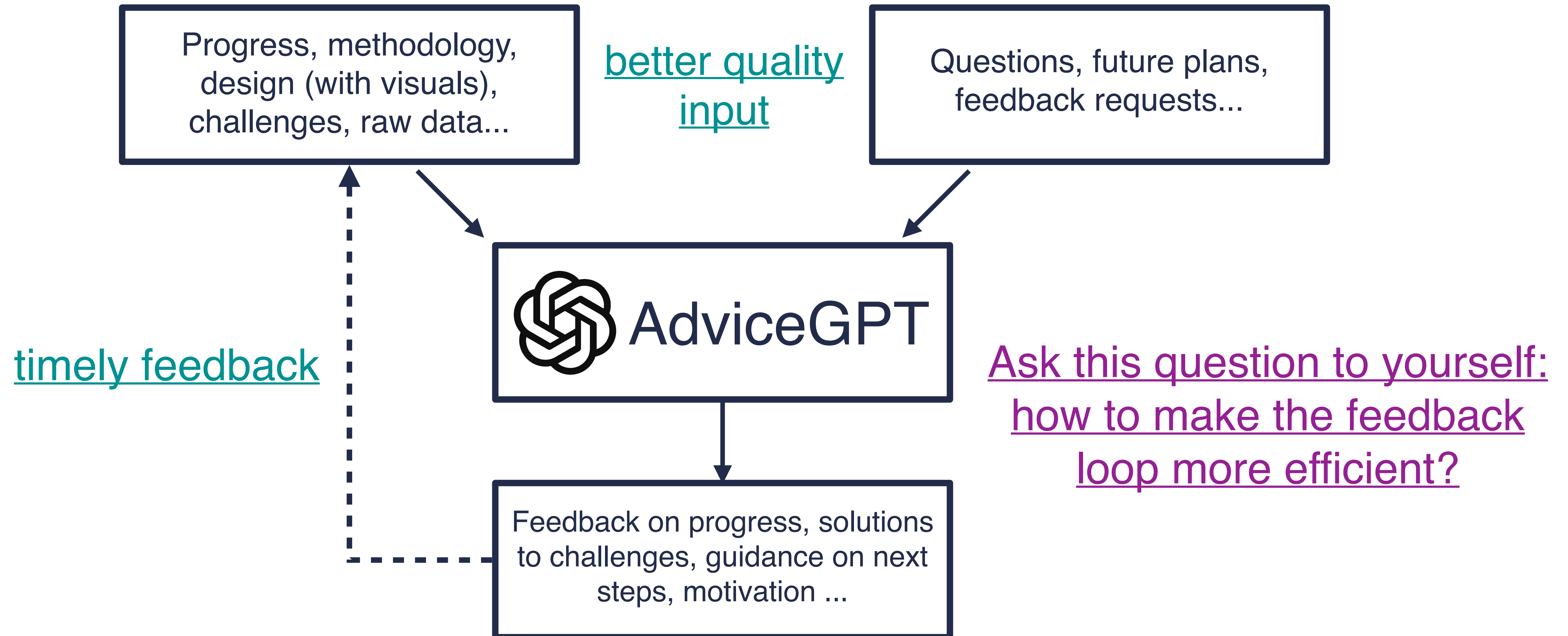
- **Principle: proactive, effective communications**
- **Don't be afraid to ask for help**
  - One main purpose of Ph.D. program is to **train** good researchers
  - Take the initiative to win more resources for yourself
- **Advisor is not always right**
  - Dare to voice different opinions
  - Disagreement (with justification) wins respect



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# MANAGE (UP) YOUR ADVISOR





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# **BAD TIP 2.1: COURSE WORK >> RESEARCH**

- **Try to spend all your efforts in courses**
  - "I can't meet the paper deadline cuz I need to get A+ for my OS class..."
- **Best Ph.D. students have the best GPAs**
  - Make sure you are the best of the best
- **Graduate as fast as possible with a 4.0 GPA!**
  - Never take courses from unfamiliar areas, which have higher risks



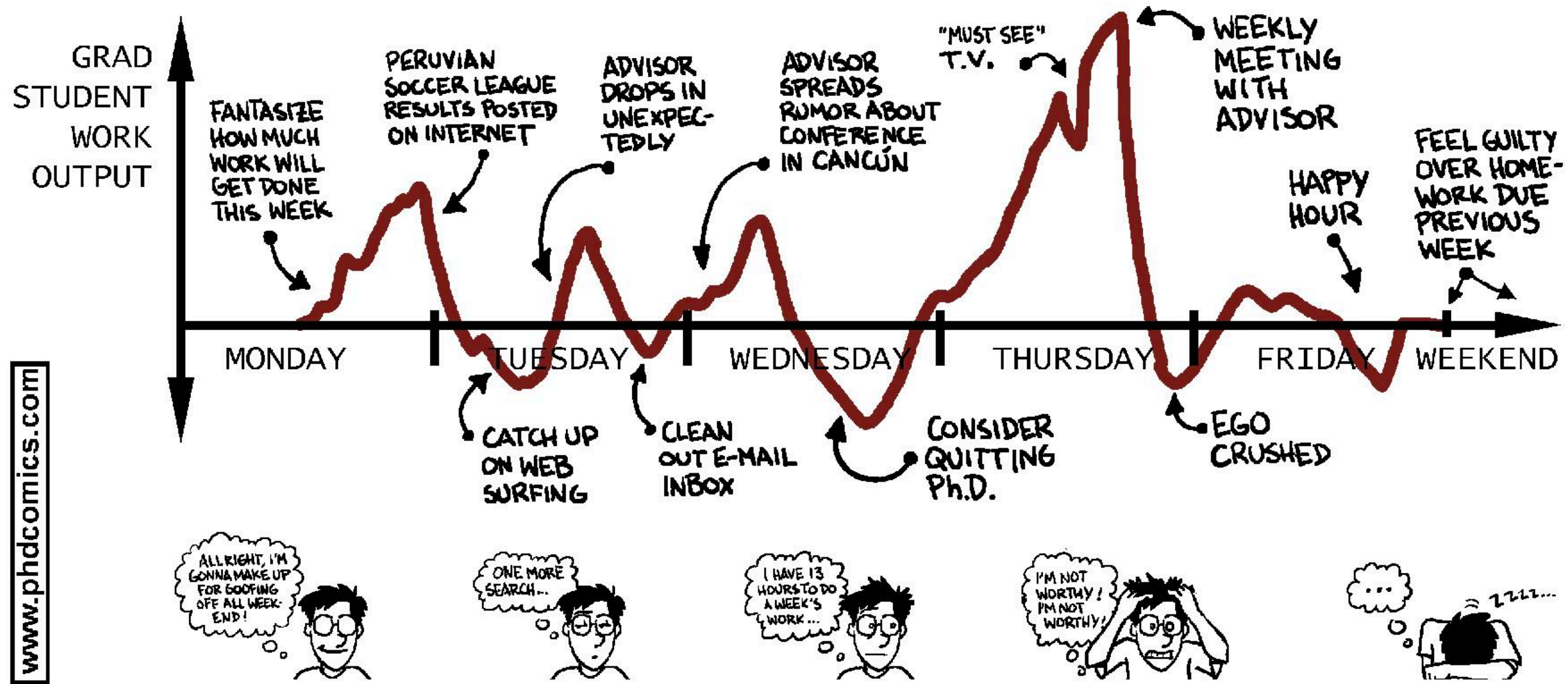
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# **GOOD TIP 2.1: TAKING COURSES WISELY**

- **As a Ph.D. student, you are eventually judged as researchers**
  - People know you because of your work, not your GPA
  - What matters: recommendation letters from researchers who appreciate your work
- **Strategy: maintain reasonable grades**
  - Almost failed several courses in my grad school..
  - But I made the first successful submission that semester
- **Courses from different domains**
  - Last chance to learn not on your own

# BAD TIP 2.2: PROCRASTINATION

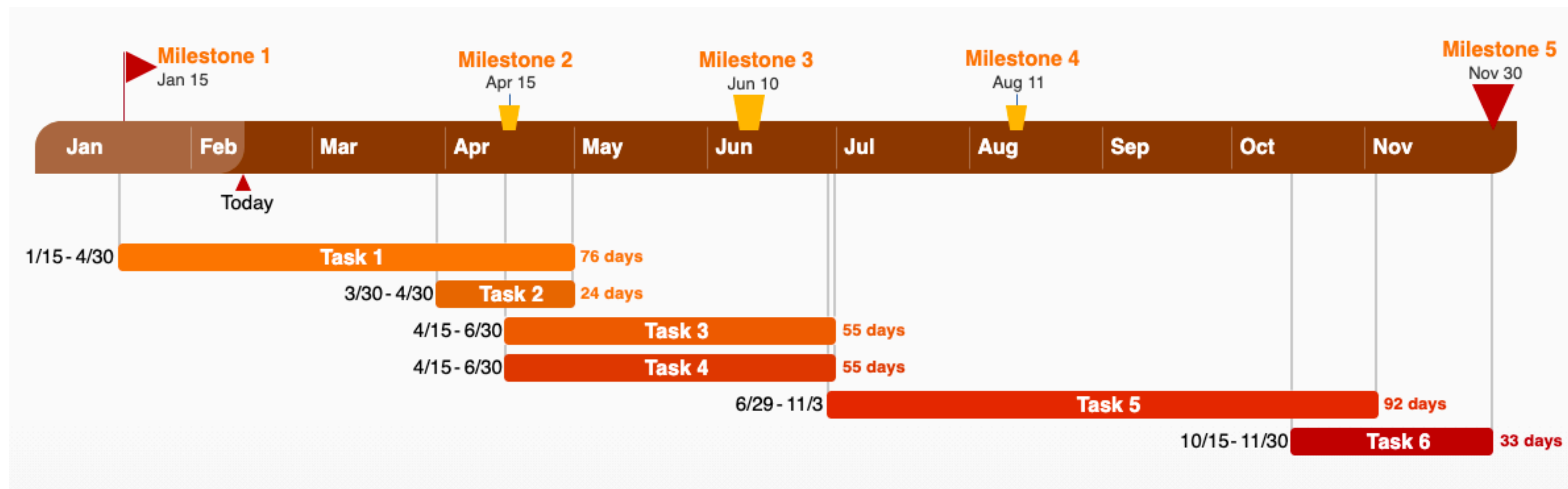


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# GOOD TIP 2.2: START NOW

- **Solution 1: start with a two-minute task**
  - Take baby steps first
- **Solution 2: visualize the progress**



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# **BAD TIP 3: WORK >> LIFE**

**– Two common pitfalls: burnout and isolation**



Burnout



Isolation

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# **GOOD TIP 3: A BALANCED WORK AND LIFE**

- **Your health matters more than anything**
  - There is still a long path after your get your Ph.D. degree..
  - Developing a healthy hobby actually improves your productivity, e.g., exercise
- **Protect your motivation carefully**
- **People walk further with accompany**
  - Find a buddy to make fun of your advisor together 😊



# TAKEAWAYS

- **Manage your advising relation**
- **Manage your time schedule**
- **Manage your personal life**

Got questions? Happy to talk!  
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This talk incorporates insights from  
other amazing advice for Ph.D.:

[1] How to Have a Bad Career in Research/Academia. David A. Patterson, Berkeley.

[2] Doing a Systems PhD. Steve Hand, Cambridge.

[3] How to Optimize the Mentoring Relationship with Your Advisor. Ryan Huang, JHU.