Advising

# PRODUCTIVITY HACKS

**IMPROVE EFFECTIVENESS AND REDUCE STRESS (WITHOUT WORKING OVERTIME).**

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Photo credit: @bruce.digital

# WHAT WE'LL COVER

- The advising workload. How we spend our time.
- What do I mean by "productivity hacks"? What *exactly* are we hacking?
- What resources do we have available to us?
- How does this make me a better advisor?



# GETTING STARTED

Life as an advisor.

# MY LIFE AS A (CS) ADVISOR*

- Daily tasks
  - Answer student emails (1-2/day → 25-50/day at peak) 1
  - Monitor MS Teams channels for Q&A (discuss unusual cases)
- Infrequent tasks
  - Advising office hours – in person or online (1 day/week) 2
  - Appointments with students (1-2/week)
- Termly tasks
  - Degree checks (informal and formal at end-of-term) 3
  - Admissions/transfers, AP, PERC (administrative, start-of-term)
  - Events (e.g., majors fair, recruitment events)

* CS has 8 advisors. Most advising is done through email.

Which tasks are the most time-consuming?

# MY ADVISING GOALS

- Reply to all requests on same-day (before 5 PM).
  - Acknowledge the request, even if I can't solve their immediate problem e.g., ask for clarification.
- Provide accurate and detailed responses.
  - Thoroughly and accurately address student questions (and anticipate the next questions if I can).
  - Include links to supporting materials e.g., academic calendar or website.
- Track the details in ASIS.
  - Write notes for myself/the next advisor. ASIS is my "source of truth".
- Inbox-Zero (link).
  - My unhealthy compulsion. You can't make me stop. Nyeaah.

# HOW TO ACHIEVE MY GOALS

- Option 1: Work until I collapse every ~~day~~ night.
  - *Really not healthy or sustainable.*
  - *My wife hates it when I do this.*
- Option 2: Subcontract?
  - *My son could use a part-time job.*
  - *Pretty sure I would be fired for this.*
- Option 3: Be more efficient.
  - *Automation!*
  - *This lets me tinker with software, which I love doing.*

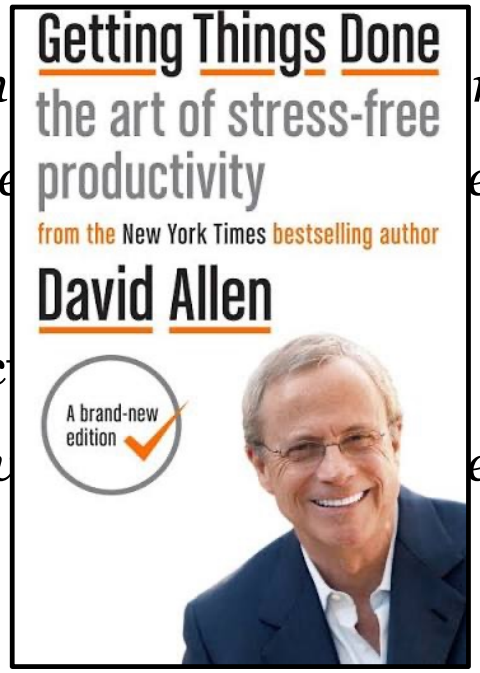
# WHAT IS A PRODUCTIVITY HACK?

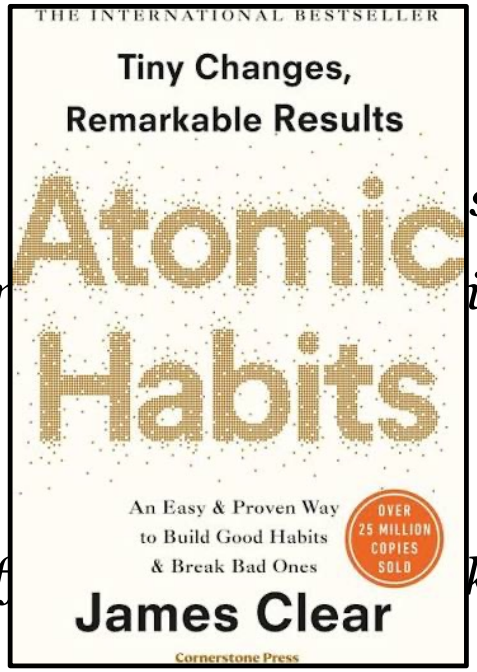
Hack:

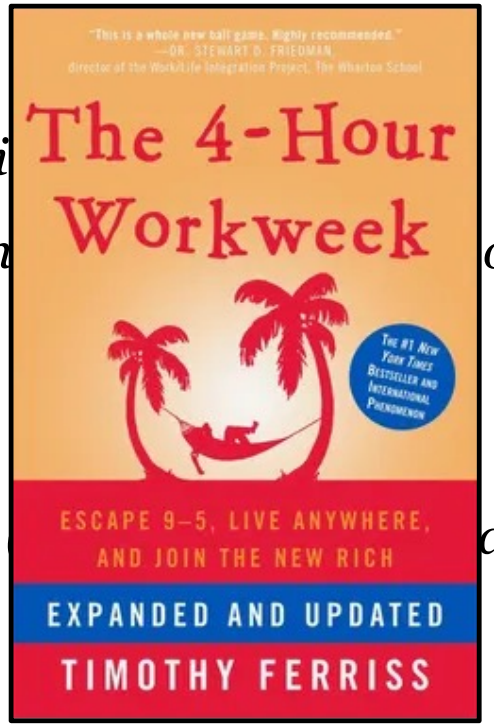
1. *To m* *r* *si*
2. *Solve* *er* *in* *orary fix.*

Produc

*Improu* *ef* *k* *done).*

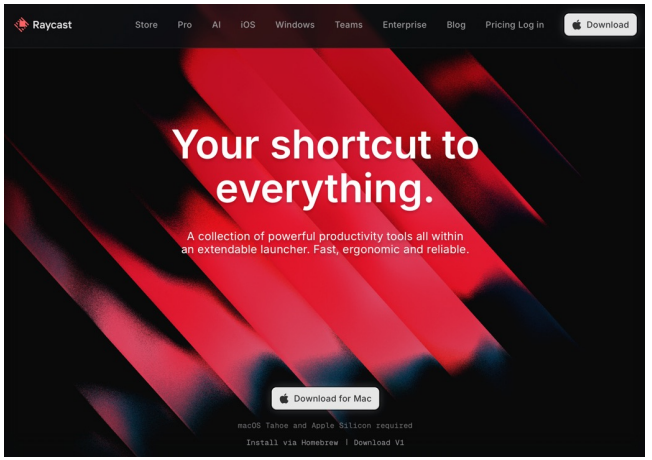


# RAYCAST

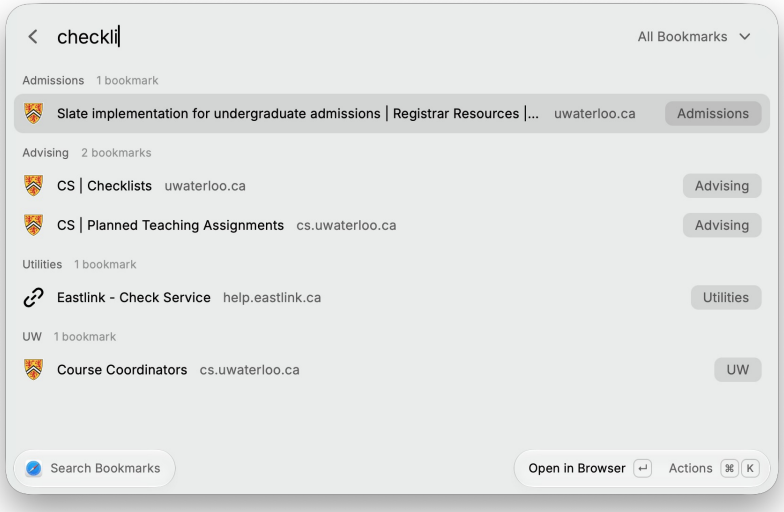
- We will talk about being efficient through *software automation*.
- There are many software applications out there that claim to help you be more productive.
- I will showcase Raycast.
  - I do not own any stock.
  - I like their product. It works.
  - It runs on both Mac and Windows.
  - It's free.
- Alt: Alfred (Mac), Flow Launcher (Win)




https://www.raycast.com

# QUICK DEMO

- Raycast is a software launcher, but it has a lot of secondary functionality too:
  - Quickly launch your applications
  - Find documents, web sites, images
  - Create hotkeys for any application/action
  - Window resizing
  - Clipboard history
  - Snippets
  - AI agents




CMD-Space pulls up Raycast.
SB [enter] searches bookmarks

# TASK 1: ANSWERING STUDENT QUESTIONS

Automating email and written responses.

# TYPICAL EMAIL TOPICS

- Can you override me into this course?
  - Why won't Quest let me add this course? (missing prerequisites, course is full). ← short answer
  - Can you override me into a *full* course ?
  - I'm in engineering, how can I take a CS course? ← much longer answer
- Can you sign this course override form (e.g., computing minor).
- Where can I get (some online form)? ← link
- How can I transfer to CS? ← much longer answer

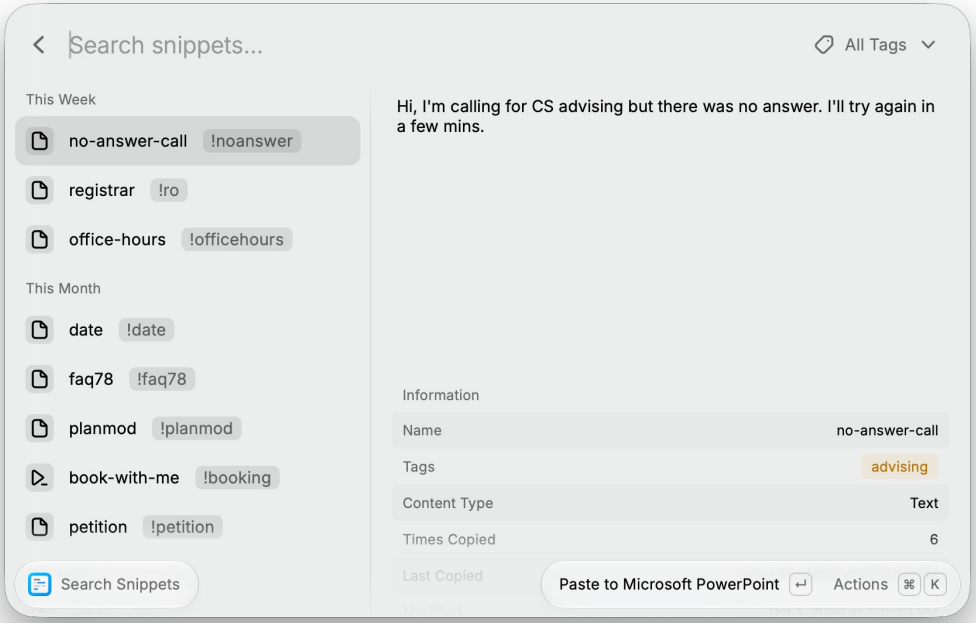
# QUICK ANSWERS > EMAIL

- How do you craft an email more quickly and efficiently?
  - Hint: not by typing out the same information over-and-over again.
  - Automate as much as you can.
- We'll talk about using:
  - Reusable snippets
  - Clipboard history
  - Email signature
  - Hotkeys for everything
  - DEMO: Raycast

# REUSING "SNIPPETS" OF TEXT

For common questions, your goal is to have a "template" response that you can reuse.

- A *snippet manager* is software that maintains a library of templates.
- Instead of typing something out, insert from your library into email (or ASIS or Word…)
- Optionally, supports placeholders where you fill in custom details.
- Examples: *registrar*, *course-is-full*, *no*
- Alt: Snippety (macOS)




Raycast Snippets

# SNIPPETS: EXAMPLES

| Name | Used In | Expands to… |
|---|---|---|
| signature | Email | Best wishes, Jeff |
| faq78 | Email | Engineering students are allowed to take CS courses under our published guidelines. I believe you are eligible, which means that we can add you … |
| no | ASIS | Course is full. Didn't course select. Not to override. |
| degree-check | ASIS | Degree requirements will be met this term. |
| no-answer | MS Teams | Hi, I'm calling for advising but there was no answer. I'll try calling again in a few minutes. |
| no-show | MS Teams | Hi, we have an advising appointment now. To join, open the event in MS Teams and click on the Join button. If today's time doesn't work, feel free to cancel and reschedule at another time. Thanks! |
| registrar | * | https://waterloo.ca/the-centre |
| petition | * | https://uwaterloo.ca/forms/undergraduate-studies/petition-exception-academic-regulations |

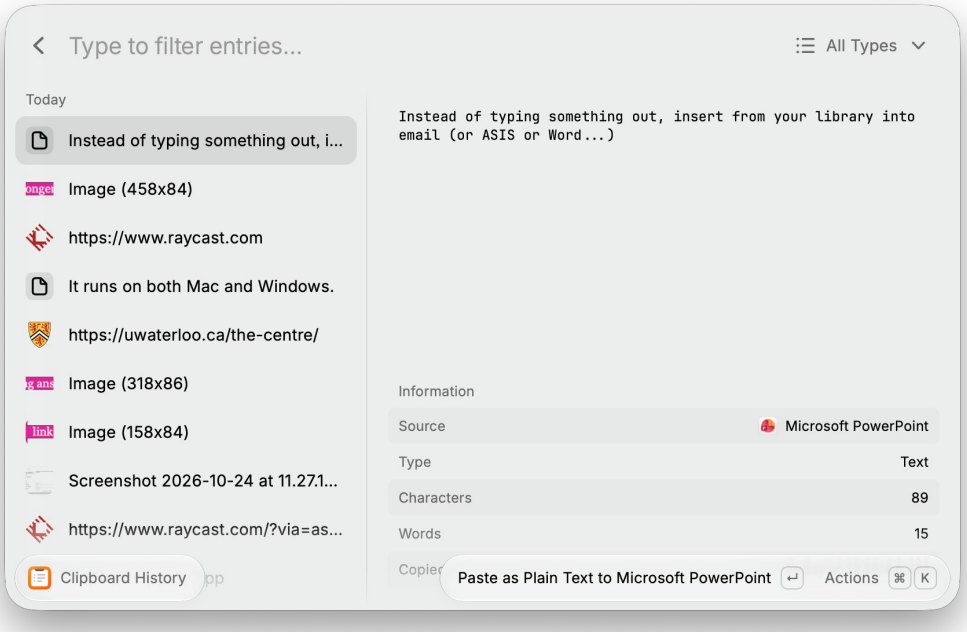
# MANAGING CLIPBOARD HISTORY

Snippets only work if you set them up ahead of time. However, you don't anticipate the need to repeat yourself.

- e.g., "This seems familiar. Didn't I give someone this link earlier?"

A *clipboard manager* maintains a list of everything you have copy-pasted.

- Browse or search your clipboard history
- Insert something from earlier today (or yesterday, ...)
- Alt: Built-in, Maccy (macOS)




Raycast Clipboard History

# SIGN YOUR WORK

- Make sure that you have your signature setup in MS Outlook.
- It should automatically appear when you reply.
  - Check email settings.
  - Optionally include your bookings page.

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# HOTKEYS

- Point-and-click is the enemy of productivity! Use hotkeys!
- Example:
  - CMD-R to reply to email (Outlook)
  - CTRL-SHIFT-S to pull up snippets, or
  - Use snippet hotkeys !faq78 → !sig
  - CMD-Enter to send the email
- Demo: reply to an email.




*ChatGPT. Is there anything it can't generate?*

# TASK 2: INTERACTIVE ADVISING

Tools that are more interactive, that also we use in-person.

# INTERACTIVE ADVISING

How is in-person advising different from answer questions by email?

- Often students don't need a quick answer, but instead need to understand a more complex problem e.g., what happens if I fail a course?
- They may want to plan their degree. Can I add this minor? How will that change my course load?
- Focus on reviewing information with them.
  - Our goal is to have information readily available and viewable.

# REVIEWING MATERIAL ONLINE

Most of the data that we share is publicly available to students.

Focus on finding it quickly during your conversation.

1. Have browser bookmarks for common pages and use Raycast to search bookmarks.
   - `Raycast > Search Bookmarks > [site name]`, ← e.g., search for *checklists*
2. Use `Quicklinks` to jump instantly to key websites and information.
   - `Raycast > [keyword ]` ← e.g., keywords for *transfer* or *cs346*.

Alt: Alfred (Mac)

Demo: Add the MUO homepage and re-search using the keyword.

# QUICKLINKS: EXAMPLES

| Name | Keyword | Opens… |
|---|---|---|
| CS 346 | cs346 | My course homepage |
| Homepage | homepage | Personal homepage |
| GitLab Projects | gitlab | Front page of GitLab |
| **ASIS Search** | asis | ASIS search ($1) – *dynamic* |
| **Schedule of Classes** | schedule | OAT schedule of classes (TAB, then enter data) |
| **Courses** | courses | Kuali list of CS courses |
| **Plans** | plans | Kuali list of CS plans |
| Apply to Transfer | transfer | CS transfer application page |
| Odyssey | odyssey | Odyssey front page |
| Quest | quest | Quest front page |
| Wikipedia | wiki | Wikipedia search ($1) – *dynamic* |

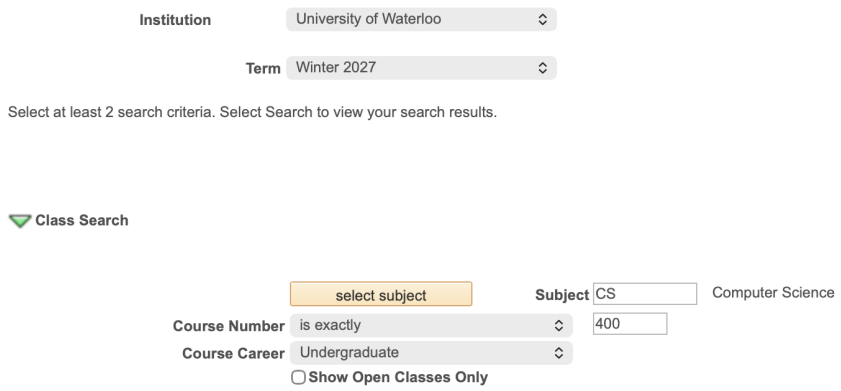
# REVIEWING COURSE DATA

Sometimes we're asked questions about course sections.

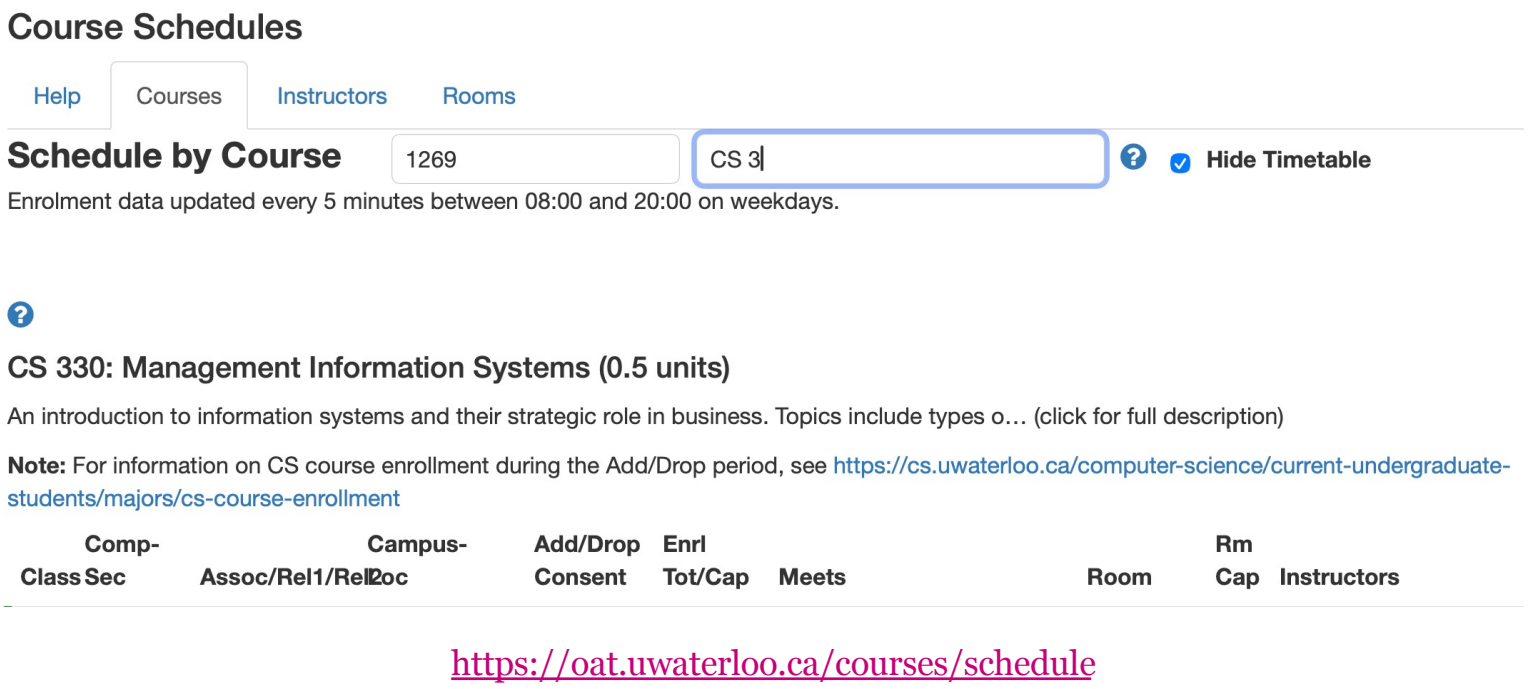
- What courses are offered next term? Which sections have space?
- Which 4th year courses are available to meet my degree requirements?

Three sources of information:

1. Quest class search
2. Schedule of classes (web) - *EOL*
3. Schedule of classes (ASIS)



# ASIS SCHEDULE OF CLASSES




https://oat.uwaterloo.ca/courses/schedule

# SEARCHING THE ASIS SCHEDULE

- How does the search field work?
  - Simple: it matches any string that you enter. e.g., 'CS 3' will find any CS 3XX courses.
  - Complex: you can use regular expressions to provide a more complex pattern that ASIS will use to return matching courses.
- How do regular expressions work?
  - Replace the text with special character sequences that tell it what/how to match.
  - e.g., a pipe "|" means "OR", so "CS 3|4" would match "CS 3" or "CS 4"

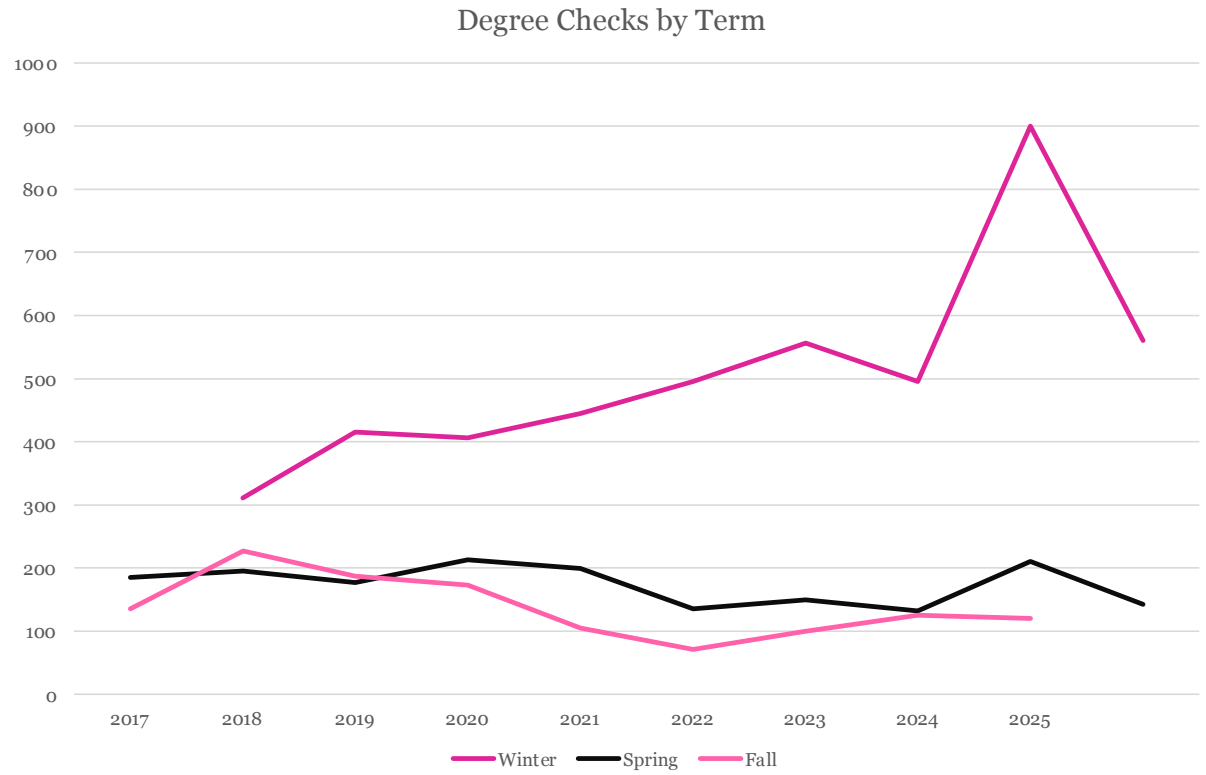
# BASIC REGEX RULES

- A vertical bar shows alternatives.
  - `STAT 230|STAT 231` would match both `STAT 230` and `STAT 231`.
- Parentheses are used to define the scope.
  - `STAT (230|231)` would also return both `STAT 230` and `STAT 231` in ASIS.
  - `MATH 1(3|4)7` would return both `MATH 137` and `MATH 147` details.
- Square brackets indicate a sequence.
  - `MATH 1[2-4]7` would match `MATH 127`, `MATH 137` and `MATH 147`.
- ? indicates that the preceding element (character) is optional.
  - `CS 240E?` would match `CS 240` and `CS 240E`

# TASK 3: DEGREE CHECKS

How to speed them up (while maintaining accuracy!)

# MOTIVATION


Degree Checks by Term
1000
900
800
700
600
500
400
300
200
100
0
2017
2018
2019
2020
2021
2022
2023
2024
2025
Winter
Spring
Fall

# DEGREE AUDIT

- Degree Audit (DA) was introduced to improve our efficiency when performing degree checks in-bulk.
  - The goal was to automate as much of the process as possible.
  - It is very *conservative*. It will flag anything that is even a bit suspect for a person to check.
  - Recommend that you use this instead of doing manual checks (*when possible*!)
- How it works
  - We have encoded every recent plan into ASIS (IIRC we have 99% coverage since 2016).
  - DA matches the student's *currently registered plan* and reports what is missing.

# DEGREE AUDIT EXAMPLE - COMPLETE

Courses | Degree Audit | Program | Schedule | Coop | Course Select | Milestones | Honours/Awards | Degrees

Audit | Requirements

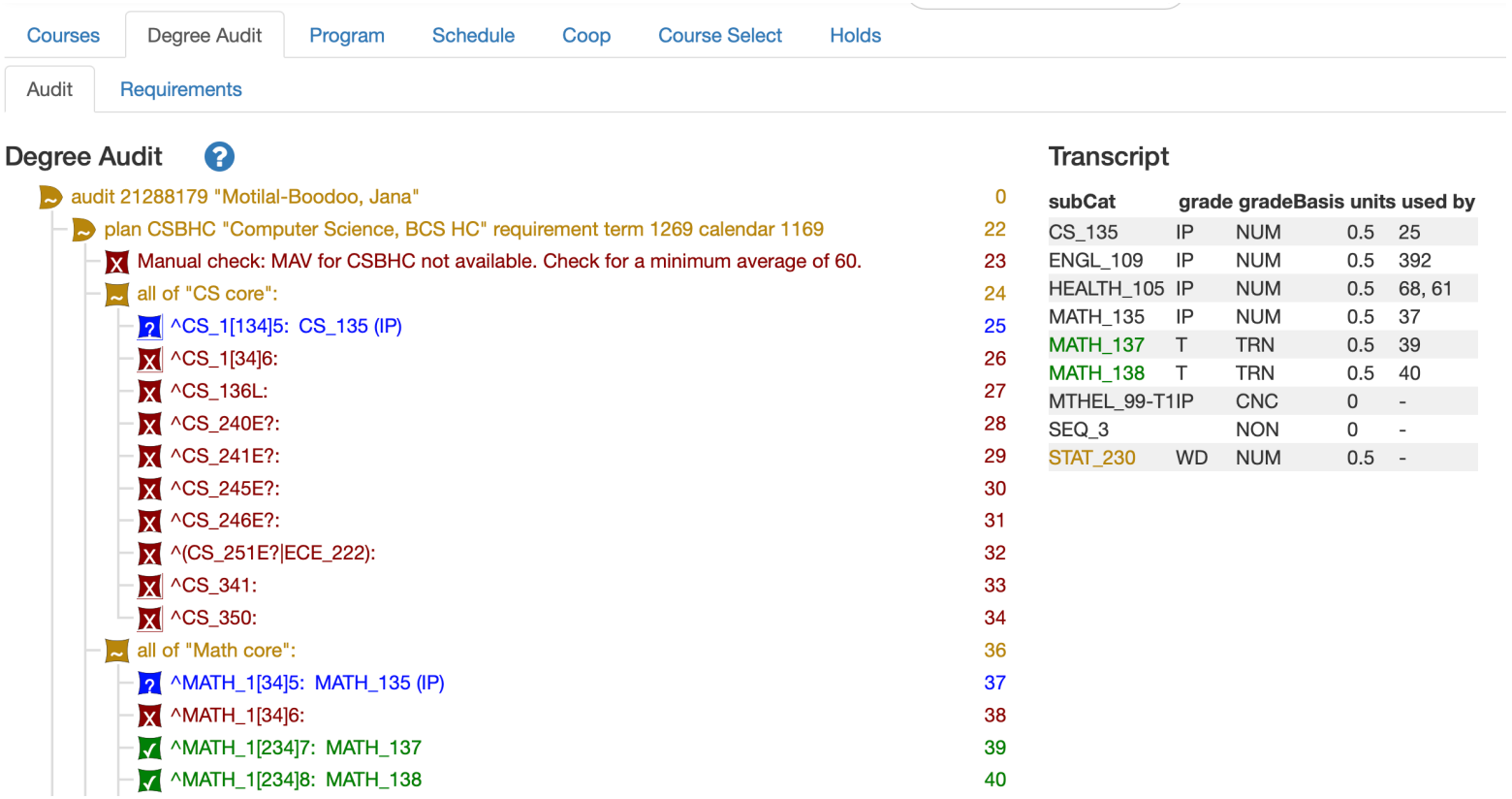
## Degree Audit

- audit 20773593 "Sharma, Siddhant" 0
  - plan CSBHC "Computer Science, BCS HC" requirement term 1189 calendar 1169 22
    - minAverage(MAV, CSBHC, 60) 23
    - all of "CS core": 24
      - ^CS_1[134]5: CS_135 25
      - ^CS_1[34]6: CS_136 26
      - ^CS_240E?: CS_240 27
      - ^CS_241E?: CS_241 28
      - ^CS_245E?: CS_245 29
      - ^CS_246E?: CS_246 30
      - ^(CS_251E?|ECE_222): CS_251 31
      - ^CS_341: CS_341 32
      - ^CS_350: CS_350 33

## Transcript

| subCat | grade | gradeBasis | units | used by |
|---|---|---|---|---|
| BUS_111W | A | ABC | 0.5 | 58 |
| BUS_121W | A | ABC | 0.5 | 58 |
| BUS_127W | A | ABC | 0.5 | - |
| BUS_283W | A- | ABC | 0.5 | - |
| BUS_288W | A | ABC | 0.5 | - |
| CLAS_104 | 98 | NUM | 0.5 | 57 |
| CS_135 | 73 | NUM | 0.5 | 25 |
| CS_136 | 69 | NUM | 0.5 | 26 |
| CS_240 | 74 | NUM | 0.5 | 27 |
| CS_241 | 91 | NUM | 0.5 | 28 |
| CS_245 | 92 | NUM | 0.5 | 29 |
| CS_246 | 68 | NUM | 0.5 | 30 |
| CS_251 | 92 | NUM | 0.5 | 31 |
| CS_341 | 86 | NUM | 0.5 | 32 |

# DEGREE AUDIT EXAMPLE – IN PROGRESS

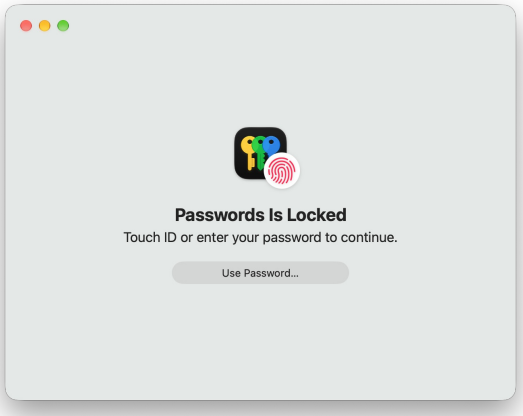


# MISC. TIPS

What else can we do? Things not directly tied to advising…

# QUICKLY ACCESS PASSWORDS

- How many times a day do you login at work? Speed it up with a password manager!
- It's faster to have a password manager prompt you for your fingerprint than to type a complex password.
  - Your passwords are strong/complex right?
- Use a password manager with biometrics e.g., facial recognition, fingerprints.
  - Use as trusted product.
  - Don't save your passwords in a big text file or spreadsheet. Please.



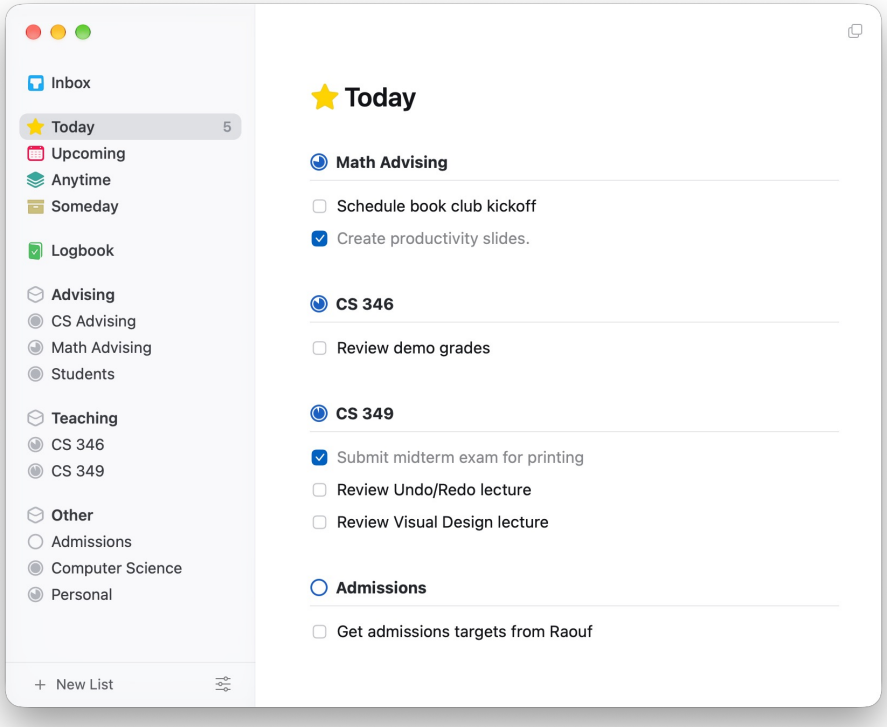

Apple's Password application. There are many others e.g., 1Password, Lastpass.

Buy Canadian!

# WRITE THINGS DOWN

Seems obvious, but *write things down so you don't forget them*.

- Keep a checklist of things that you are working on (or need to do).
  - e.g., follow-up with student X, take next step in project Y.
- Add to it through the day.
- In the morning, prioritize and assign yourself work.
- Example: Things, Microsoft Tasks.



# WRAPUP

I’ve got to be at-time by now.

# RAYCAST INSTALLATION

1. Download the installer from https://raycast.com.
2. Run the installation wizard and grant various permissions.
3. `Raycast` > `Settings`
   - `General` > `Raycast Hotkey` to some key combination that doesn't conflict.
   - `Shortcuts` > to set application shortcuts e.g., CTRL - ` to open a terminal session.
   - `Quicklinks` > setup URLs/keywords e.g., `homepage` to open my homepage URL.
   - `Snippets` > to setup snippet preferences.
4. (Optional) `Import Snippets`, `Import Quicklinks` to use Jeff's setup.

# SUMMARY

- Automate anything repetitive.
- Aim to improve speed while ensuring accuracy/consistency.
- Benefits
  - Consistent answers for students
  - Reduced effort and stress on us during peak times
  - More time to focus on the complex cases