CARLETON COMPUTER SCIENCE SOCIETY

JOBUARY

Land Your First Tech Job

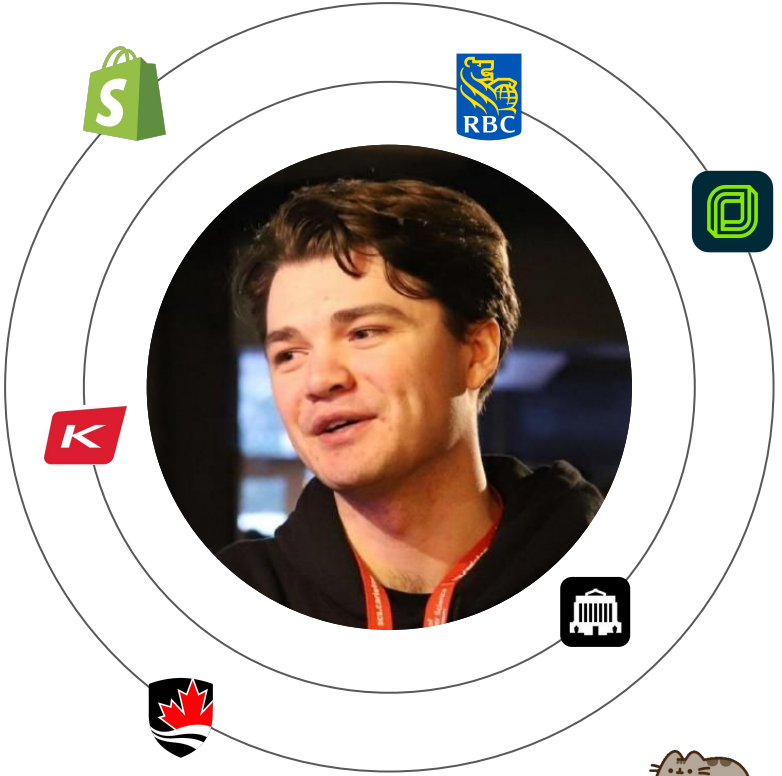
A Guide for landing your first tech job

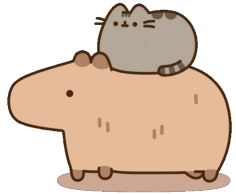
By: Matthew MacRae-Bovell

CARLETON COMPUTER
SCIENCE SOCIETY

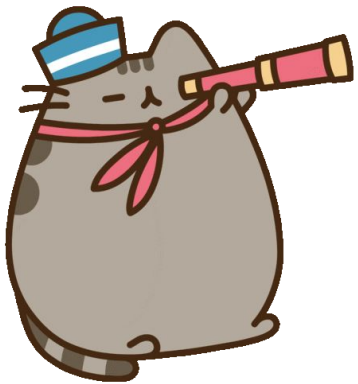
I'm Matthew 👋

- CS @ Carleton, Started 2018
- Previous CCSS President
- Government, Startups, Freelance, Big Tech, & More





CARLETON COMPUTER SCIENCE SOCIETY



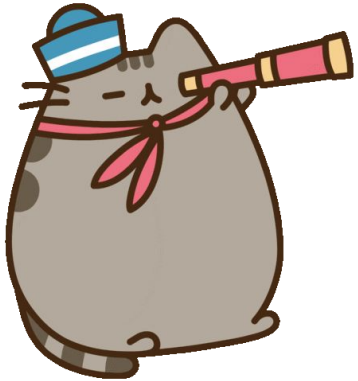
Year	Fall	Winter	Summer	Results
2018 - 2019	5 Courses	5 Courses	0 Courses	10 / 40 Courses 4 Months Experience
2019 - 2020	5 Courses	5 Courses	0 Courses	20 / 40 Courses 16 Months Experience
2020 - 2021	1 Course	2 Courses	2 Courses	25 / 40 Courses 2+ Years Experience
2021 - 2022	3 Courses	2 Courses	2 Courses	32 / 40 Courses 3+ Years Experience
2022 - 2023	2 Courses	1 Course	0 Courses	35 / 40 Courses 4+ Years Experience
2023 - 2024	1 Course	0 Courses	0 Courses	36 / 40 Courses 5+ Years Experience
2024 - 2025	1 Course	1 Course		

CARLETON COMPUTER SCIENCE SOCIETY

4 Years of Work Experience Before Graduation: Working and Studying At The Same Time

My alternative path to gaining work experience as a student and what I learned along the way.

Matthew MacRae-Bovell
May 19, 2023



December 19, 2024

Navigating Career Fairs As A Computer Science Student

Essential tips for students to navigate career fairs and stand out to recruiters and developers

December 18, 2024

Making The Most of Your Software Developer Internship

A guide to excelling in software developer internships and laying the groundwork for a successful tech career

December 1, 2024

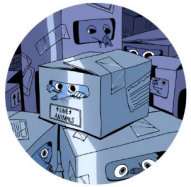
Software Skills to Make Your Student Resume Stand Out

Skills not emphasized in university that will help your resume stand out to developers and hiring managers

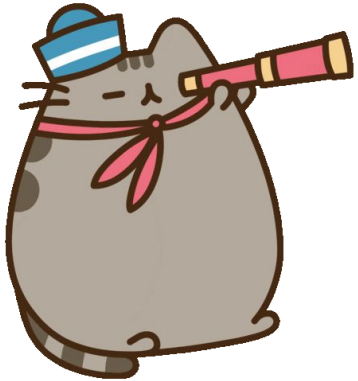
November 27, 2024

A Hidden Cost Of Remote Work On Early Developer Growth

The impact of meeting aversion and isolation on the growth of corporate communication skills



CARLETON COMPUTER SCIENCE SOCIETY



Matthew MacRae-Bovell

Coffee Chat

20 min

Web conferencing details provided upon confirmation.

Let's chat about careers, university, programming, or anything else :)

Cookie settings Report abuse

Select a Date & Time

January 2025

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Time zone

Eastern Time - US & Canada (1:07am)

Troubleshoot

Tuesday, January 14

5:00pm
5:15pm
5:30pm
5:45pm
6:00pm
6:15pm
6:30pm
6:45pm
7:00pm

Powered by Calendly

CARLETON COMPUTER SCIENCE SOCIETY

What Is This Presentation?

Everything You Need To Land Your First Tech Job

CARLETON COMPUTER SCIENCE SOCIETY

Agenda

- **Prelude**
  - State of Industry
  - Guiding Philosophy
- **Job Searching**
  - Reading Positions
  - Finding Positions
  - Carleton Co-op
- **Networking**
  - Career Fairs
  - LinkedIN
- **Applying**
  - Resumes
  - Cover Letters
- **Interviews**
  - Interview Types
  - How To Prepare

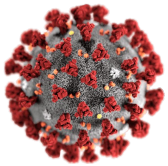
CARLETON COMPUTER SCIENCE SOCIETY

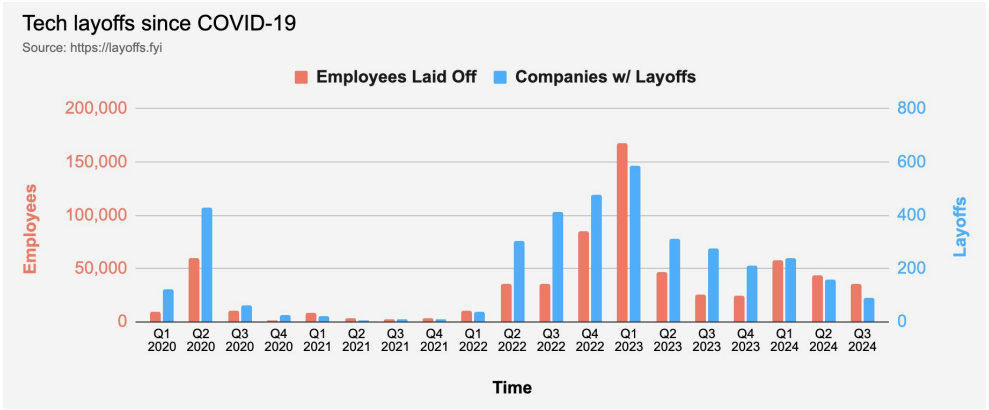
Prelude

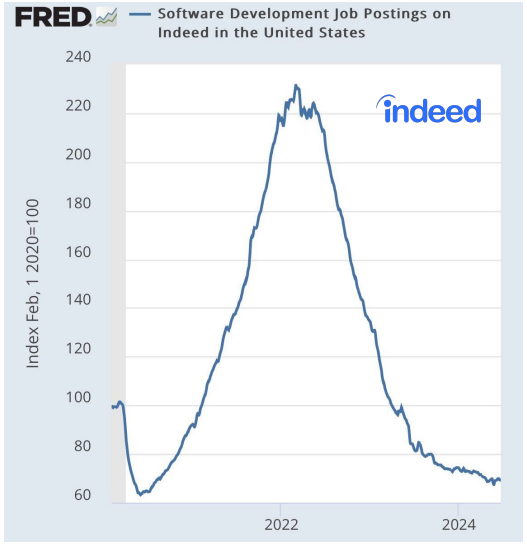
CARLETON COMPUTER SCIENCE SOCIETY

You've Probably Heard There Is A Lack of Entry Level Positions

CARLETON COMPUTER SCIENCE SOCIETY







GitHub Copilot

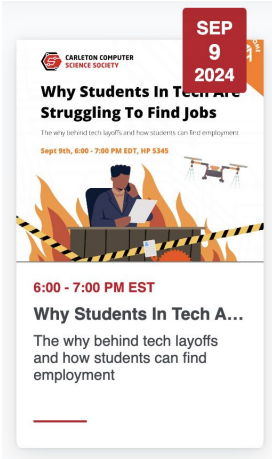
Newsletters

The Atlantic

Last year, 18 percent of Stanford University seniors graduated with a degree in computer science, more than double the proportion of just a decade earlier. Over the same period at MIT, that rate went up from 23 percent to 42 percent. These increases are common everywhere: The average number of undergraduate CS majors at universities in the U.S. and Canada tripled in the decade after 2005, and it keeps growing. Students' interest in CS is intellectual—culture moves through computation these days—but it is also professional. Young people hope to access the wealth, power, and influence of

CARLETON COMPUTER SCIENCE SOCIETY

Where Did All The Jobs Go?



Why Computer Science Students Are Struggling To Find Jobs

How the pandemic, rising enrollment, and AI have reshaped the job market and led to less capable university graduates.

Matthew MacRae-Bovell
September 9, 2024

CARLETON COMPUTER SCIENCE SOCIETY

An Uncomfortable Truth:

By default, computer science students DO NOT learn many "in demand" skills during university

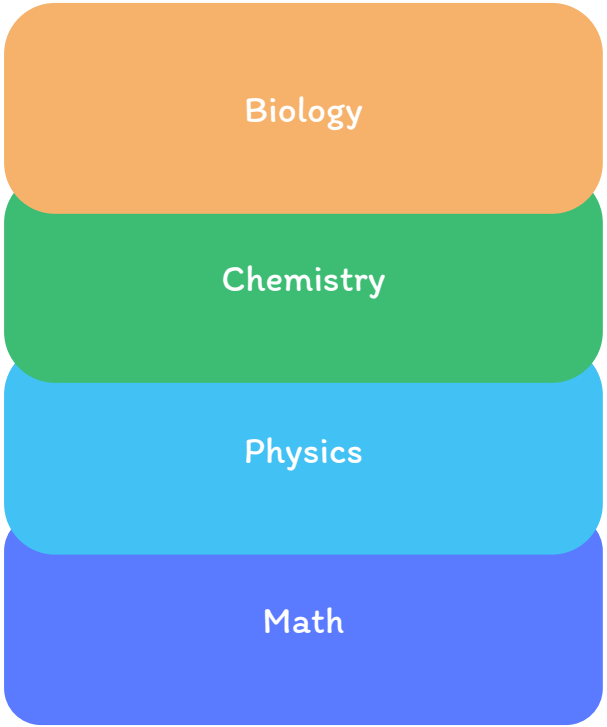
CARLETON COMPUTER
SCIENCE SOCIETY

“Industry is mostly hiring Software Engineers, Data Scientists, Security Analysts... Not Computer Scientists”

CARLETON COMPUTER
SCIENCE SOCIETY

A Misunderstanding of Computer Science As A Field

CARLETON COMPUTER
SCIENCE SOCIETY



CARLETON COMPUTER SCIENCE SOCIETY

Applications Of Computer Science

Software Engineering | Cybersecurity | Artificial Intelligence | Game Development

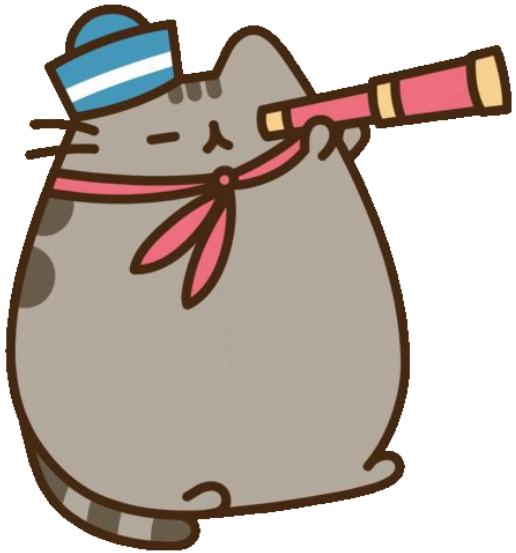
Computer Science

Math

CARLETON COMPUTER SCIENCE SOCIETY

Most of our degree is just foundation.
It's really important to know, but not what industry is seeking in candidates.

CARLETON COMPUTER SCIENCE SOCIETY



COMP 1405

COMP 1406

COMP 1805

COMP 2401

COMP 2402

COMP 2404

COMP 2406

COMP 2804

COMP 3000

COMP 3004

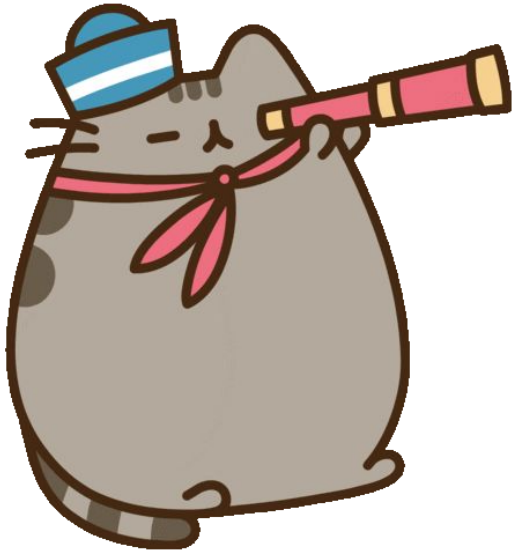
COMP 3005

COMP 3007

COMP 3804

CARLETON COMPUTER SCIENCE SOCIETY

Direct Applications



COMP 1405

COMP 1406

COMP 1805

COMP 2401

COMP 2402

COMP 2404

COMP 2406

COMP 2804

COMP 3000

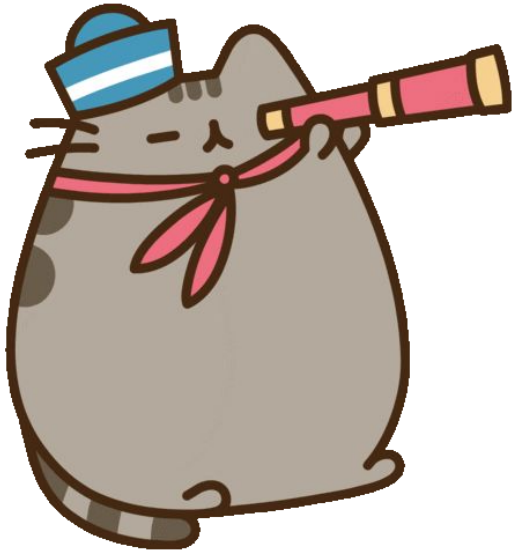
COMP 3004

COMP 3005

COMP 3007

COMP 3804

CARLETON COMPUTER SCIENCE SOCIETY



At Best**

COMP 1405

COMP 1406

COMP 1805

COMP 2401

COMP 2402

COMP 2404

COMP 2406

COMP 2804

COMP 3000

COMP 3004

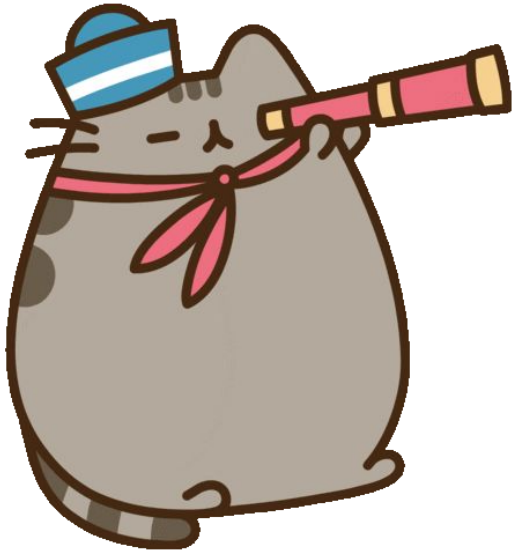
COMP 3005

COMP 3007

COMP 3804

CARLETON COMPUTER SCIENCE SOCIETY

Interviews



COMP 1405

COMP 1406

COMP 1805

COMP 2401

COMP 2402

COMP 2404

COMP 2406

COMP 2804

COMP 3000

COMP 3004

COMP 3005

COMP 3007

COMP 3804

CARLETON COMPUTER SCIENCE SOCIETY

This Notion Is Fundamental To How You Present Yourself

(Most of industry wants your “applied” skills”)

CARLETON COMPUTER SCIENCE SOCIETY

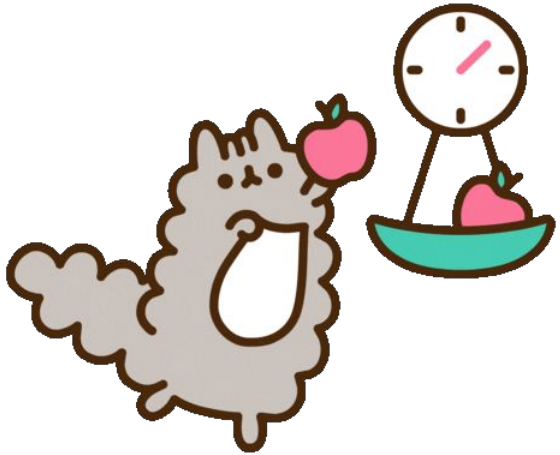
Standing Out Requires Going Outside The Classroom

(Projects, Volunteering, etc)

CARLETON COMPUTER SCIENCE SOCIETY

It's All About Funnels

You don't have to do all these things, but the more things you do will increase your chance of finding a job.



CARLETON COMPUTER SCIENCE SOCIETY

Job Searching

CARLETON COMPUTER SCIENCE SOCIETY

Internship vs “Co-op”

“Must be in an accredited Canadian cooperative education program”.

Usually indicates you need to be in a co-op program so that institution can receive a **tax break**.

Apply **anyways**, just know that it may not work out.

CARLETON COMPUTER SCIENCE SOCIETY

Term Lengths

4 months

Can be very short, you might not get to experience as much

You can often ask to extend

I've **personally** found my learning peaks around 4 months

8-16 months

More likely to be given ownership

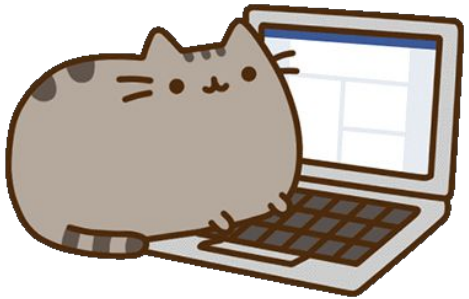
If you dislike the work or environment, you're stuck

Will appear more **significant** after you graduate

CARLETON COMPUTER SCIENCE SOCIETY

Job Titles

- **Software Developer**
  - Generic, assumes you'll be doing some form of "development"
- **Backend**
  - "Business Logic", not view related
- **Frontend**
  - View related
- **Fullstack**
  - Backend + Frontend



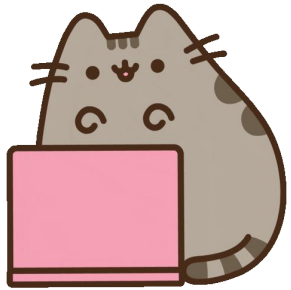
- **Web Designer / Web Master / Web Developer... when people add Web to the title**
  - Gives me the vibe I'm about to basically just do generic HTML, CSS and JS

CARLETON COMPUTER SCIENCE SOCIETY

Job Titles

- **DevOps**
  - DevOps = Developer Operations
  - Ex: Creating CI/ CD pipelines
  - “IT for Developers”

- **Site-Reliability / Production Engineer**
  - “Keeps the application running”
  - Concerned with infrastructure, scalability, deployment, observability, etc



CARLETON COMPUTER SCIENCE SOCIETY

Job Titles

- **Data Scientist**
  - Uses data to help organizations make better decisions.
  - AI and ML is a subset, but applied machine learning can be a separate title
- **Data Engineering**
  - Is a software engineer who collects, manages, and transforms data into usable information for organizations
- **Quality Assurance / Automation / Testing**
  - Manually testing or writing automation tests for other people's code
- **Anything “IT” Related**
  - focus on making sure that hardware devices, systems, and software work together

CARLETON COMPUTER SCIENCE SOCIETY

Job Titles

- **Business Analyst**
  - “Analyses” what the business needs, writes up specifications for the developers
- **Product Manager**
  - Manages the product delivery, coordinates with stakeholders, design, and engineering to determine priorities
- **Product Designer, UI / UX**
  - Mockups, wireframes, prototypes of the desires interfaces, not necessarily implementing them with code

CARLETON COMPUTER SCIENCE SOCIETY

Intern → Junior / New grad/ Associate / {title} i → Intermediate / {title} ii → Senior → Manager / Staff

0-2 Years of Experience

5-7 Years+ ***

Individual Contributor Vs Manager

CARLETON COMPUTER SCIENCE SOCIETY

When To Search for Internships

Summer

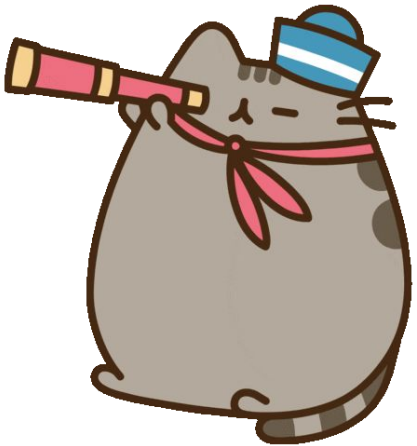
- Summer is the **most** competitive term (few people are in school)
- August - March

Fall

- The **least** competitive term (everyone's going back to school)
- May - July

Winter

- More competitive than Fall
- September - November



*** In reality you kind of never stop looking...

CARLETON COMPUTER SCIENCE SOCIETY

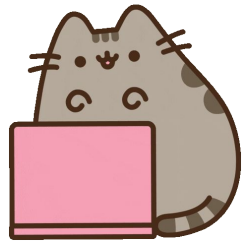
Where to Search - Surface Level Options

Co-operative Education
CARLETON UNIVERSITY

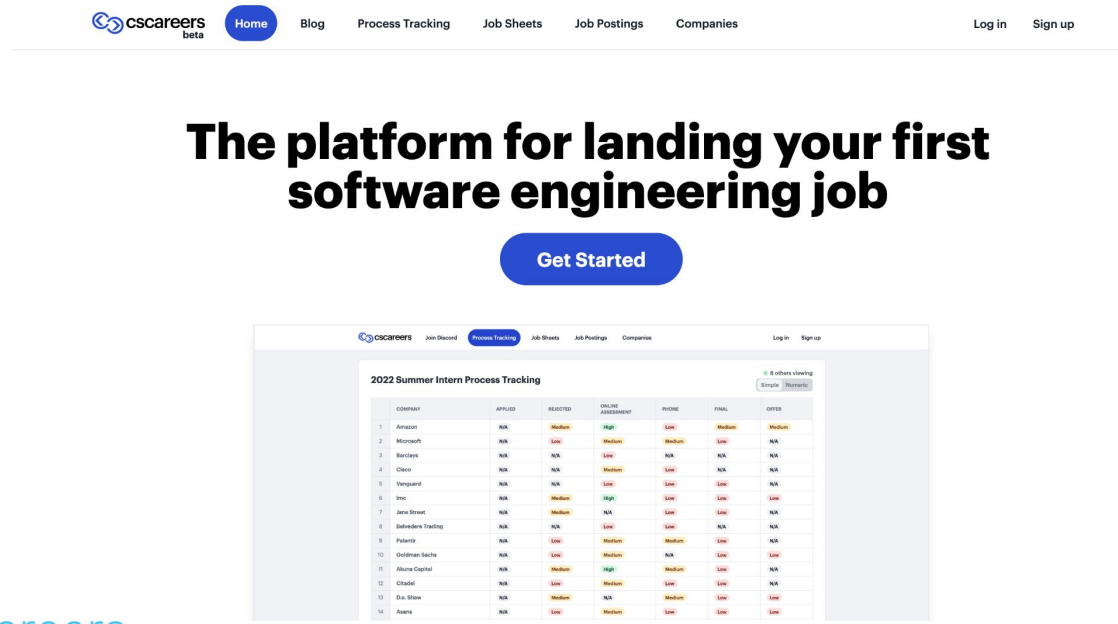
indeed™
one search. all jobs.

Title Permutations + location

- Software Developer Intern
- Developer Intern
- Software Intern
- Software Developer co-op
- Developer co-op
- Software co-op



CARLETON COMPUTER SCIENCE SOCIETY



https://www.cscareers.dev/

https://discord.com/invite/cscareers

CARLETON COMPUTER SCIENCE SOCIETY

Carleton & Ottawa Opportunities

CARLETON COMPUTER SCIENCE SOCIETY

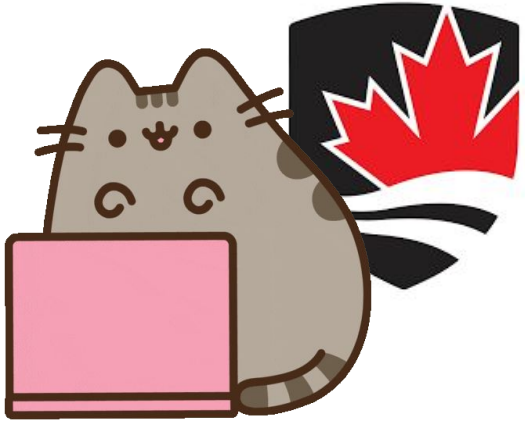
Dean's Summer Research Internships

- Work with professors to conduct research
- Requires a **CGPA of 10**
- Requires you to inquire with profs on your own

CARLETON COMPUTER SCIENCE SOCIETY

Internship-Carleton University Research Experience for Undergraduate Students (I-CUREUS)

- 2nd Year+
- Another paid research opportunity



CARLETON COMPUTER SCIENCE SOCIETY

SAPP (Students as Partners Program)

- Get paid to partner with faculty on a project that enhancing teaching and learning at Carleton

CARLETON COMPUTER SCIENCE SOCIETY

Federal Student Work Experience Program

- Adds you to a job bank for different departments within the Government of Canada
- Lets you list your fields of interests

CARLETON COMPUTER SCIENCE SOCIETY

ERICSSON

90% of Canada's industrial telecommunications research takes place in Ottawa

Consider taking **COMP 3203**: Principles of Computer Networks

CARLETON COMPUTER SCIENCE SOCIETY

Carleton's Co-op Program

CARLETON COMPUTER SCIENCE SOCIETY

Question?

Talk to Your Co-op Student Advisor

Elliott Godin

Co-op Student Advisor- BEng (Comms, CompSys, Software)

Full Profile

Suzanne Knight

Co-op Student Advisor - BCS

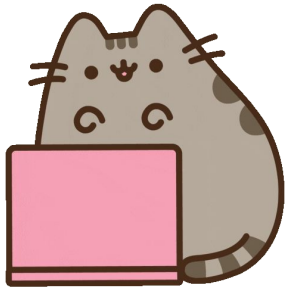
Full Profile

CARLETON COMPUTER SCIENCE SOCIETY

Co-op Jobs Portal

To apply you include

- Resume
- Cover Letter
- **Grades Page**



Shortlist	Apply	Deadline in 2 day(s)	2021 - Summer	106472	Junior Software Developer	2KEYS Corporation	Development
Shortlist	Apply	Deadline in 2 day(s)	2021 - Summer	106524	Support Technician, Infrastructu…	Agriculture and Agri-Food Canada …	IT Client Service
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	106748	IT Service Desk Analyst	Agriculture and Agri-Food Canada …	IT Client Service
Shortlist	Apply	Deadline in 2 day(s)	2021 - Summer	106456	Software Developer (Co-op plac…	Ajile Light Industries	Research & Deve
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	106806	Hardware Design Engineering St…	Arkalumen Inc.	Engineering
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	106807	Software Design Engineering St…	Arkalumen Inc.	Engineering
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	106659	Software Development Student, …	Assent Compliance Inc.	Human Resource
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	106098	Software Developer Co-Op	Barracuda Networks Canada Ltd.	Human Resource
Shortlist	Apply	Deadline in 2 day(s)	2021 - Summer	106581	Trial Manager	Bell Canada	Network
Shortlist	Apply	NEW Deadline in 2 day(s)	2021 - Summer	107046	IPTV Applications Architect (12 …	Bell Canada	Video Technology
Shortlist	Apply	NEW Deadline in 14 day(s)	2021 - Summer	106987	Bell 2021 Student Opportunities	Bell	Talent Acquisition
			2021 - Summer	106595	Full Stack Developer Student	BlackBerry	Human Resource

CARLETON COMPUTER SCIENCE SOCIETY

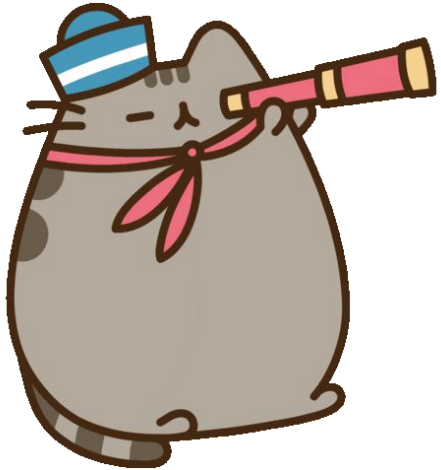
“Canadian Accredited Co-op Program” = 25%-30% refundable tax credit for employer

CARLETON COMPUTER
SCIENCE SOCIETY

Carleton Computer Science: Explaining Co-op Criticism

Why are so many computer science students so critical of Carleton's co-op program?

Matthew MacRae-Bovell
August 24, 2024



CARLETON COMPUTER SCIENCE SOCIETY

One Decline Policy: You cannot decline more than one offer per term.

If you decline any offer, you will be **forced to accept** your next offer no matter what.

Forces you to **“conservatively apply”** .

CARLETON COMPUTER SCIENCE SOCIETY

48 Hour Acceptance Window. Ultimately caters to employers rather than advocating for students

CARLETON COMPUTER
SCIENCE SOCIETY

Carleton Is The Only Canadian University With Both a One Decline Policy and 48 Hour Acceptance Window.

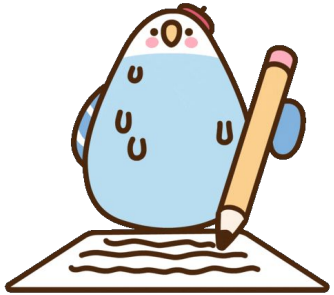
CARLETON COMPUTER SCIENCE SOCIETY

Co-op Fees

- At this time, both “co-op admin fees” and “co-op work term fees” cost **$484.25** each.
- Four co-op admin (Today: **$1937**)
- Five co-op work term (Today: **$2421.25**)
- It’s not that much given how much you pay in tuition

Year 1		Year 2		Year 3		Year 4		Year 5
Term	Pattern	Term	Pattern	Term	Pattern	Term	Pattern	Term
Fall	S	Fall	S	Fall	W	Fall	S	Fall
Winter	S	Winter	S	Winter	S	Winter	W	Winter
Summer		Summer	W	Summer	W	Summer	W	

Legend
S: Study
W: Work



CARLETON COMPUTER SCIENCE SOCIETY

Should I Do Co-op?

- **“I Found a Software Placement Previously”**
  - **No**, unless you want to the piece of mind

- **“I Have Zero Relevant Experience”**
  - **Yes**, you should pay for co-op

CARLETON COMPUTER
SCIENCE SOCIETY

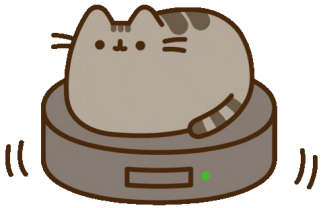
Networking

CARLETON COMPUTER
SCIENCE SOCIETY

Remember... You need to sell yourself using the correct skill set

Ex: Software Eng
!= Computer Science

CARLETON COMPUTER SCIENCE SOCIETY



Who To Network With...

Other Students

Are your future coworkers

Recruiters / Talent Acquisition

Likely don't have a technical background

Know the hiring process

Developers

Likely won't know hiring process

Can tell your manager about you

Engineering Managers

Likely have influence over final hiring decision

CARLETON COMPUTER
SCIENCE SOCIETY

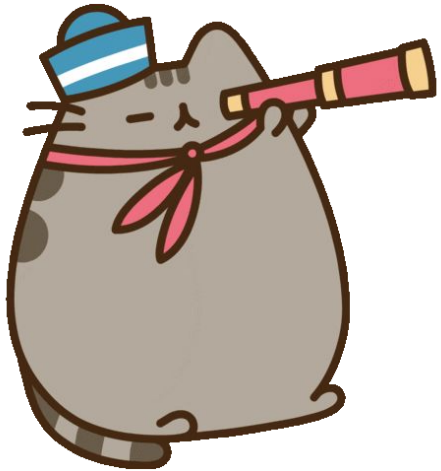
Making The Most Of Career Fairs

CARLETON COMPUTER SCIENCE SOCIETY

Navigating Career Fairs As A Computer Science Student

Essential tips for students to navigate career fairs and stand out to recruiters and developers

Matthew MacRae-Bovell
December 19, 2024



CARLETON COMPUTER SCIENCE SOCIETY

Career Events

- Conferences
- Career Fairs
- Meetups
- Hackathons (sponsors)
- Networking Events
- **Carleton MySuccess Calendar**

MLH MAJOR LEAGUE HACKING

CARLETON COMPUTER SCIENCE SOCIETY

Do Your Homework

What Does the Company Do?

What tools and technologies do they use?

Do they have internships or positions for your experience level?

CARLETON COMPUTER SCIENCE SOCIETY

** Real example from Matthew's first year

faster and more reliable plan development.

- BlackBerry QNX
  - QNX is the operating system
  - Top languages: JavaScript C++ Java C Ruby
- Trend Micro Incorporated
  - Trend Micro Inc. is a Japanese multinational cyber security and defense company founded in Los Angeles, California
  - Top languages: Python JavaScript C++ Java Go
- **Vectorface**
  - We are currently one of the forerunners in the social gaming market and we are working with teams from coast to coast to develop new games and experiences for social gamers around the world.
  - Top languages: PHP JavaScript CSS Redis (1 github project), MySQL (seen on github)
- Intouch Insight (are they a parent company??)
  - Top languages: PHP Ruby JavaScript Java
  - Check : Specialize in Mobile Form Software
  - LiaCX: Customer Experience Management Software
- Accenture
  - Top languages: Shell Groovy JavaScript Java Ruby
  - Do stuff with oracle cloud services
- Scalien Group
  - Software for avionics testing Avionics software
  - Work with drones and such
- Qlik
  - Qlik is a software company based in Radnor, Pennsylvania
  - Top languages: JavaScript Shell Go C++ Java
  - Qlik Sense: The most powerful and complete multi-cloud solution for modern BI
  - Qlik Sense Enterprise: enables the full spectrum of analytics use cases on a modern multi-cloud platform, delivering flexibility, governance and scalability for your organization.
  - Qlik Sense Cloud: Enables your group or team to get analytics up and running fast. With everything ready to go, you can quickly bring your data together and collaborate in a secure, hosted environment.
  - Qlik Analytics Platform: embedded and custom analytics
- Cisco Systems
  - Top Languages: C Ruby C++ Go JavaScript
  - Networking company
- Veem
  - Veem is a global payments platform, using SWIFT, treasury and cryptocurrency, typically bitcoin.
- Kanata North Business Association
  - Seems to be a collective of businesses
- Magnet Forensics
  - ACQUISITION TOOL FOR SMARTPHONES AND COMPUTERS

CARLETON COMPUTER SCIENCE SOCIETY

DO NOT Ask Those Questions At The Event

Asking at a career fair "what their company does" is a signal that you **did not care enough** to have googled the answer already.

CARLETON COMPUTER SCIENCE SOCIETY

Understand Your Audience

- **Recruiter / Talent Acquisition**
  - Ask about job openings and the hiring process
  - Don't be overly technical, but mention **key words** you'd see in the job posting

- **Developers & Eng Managers**
  - What team are you on?
  - What kinds of projects is your team working on?
  - What systems, services, or features is your team responsible for?

CARLETON COMPUTER SCIENCE SOCIETY

Learn to Sell Yourself

First impressions **matter**. Your introduction needs to communicate:

- Who you are
- What you want
- Your interest in the company
- and your **value proposition**

Value proposition = specific skills, experiences, or perspectives you bring to the table that align with the needs or goals of the person or organization you're speaking with.

CARLETON COMPUTER SCIENCE SOCIETY

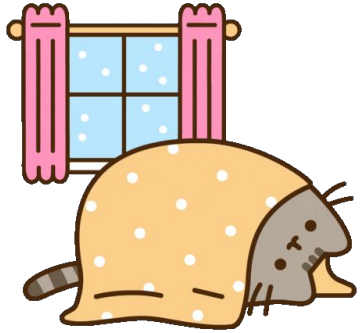
Example Introduction

"Hi, my name is Alex, and I'm a third-year computer science student at [Your University]. I've been working on projects involving machine learning, including one where I developed a predictive model for stock prices using Python and TensorFlow. I saw that [Company Name Here] is pioneering work in natural language processing, which really excites me because I've recently been diving into transformers and language models. I'd love to learn more about your projects and if you're hiring interns"

*This is a bit verbose ****

CARLETON COMPUTER SCIENCE SOCIETY

More Career Fair Advice



- **Create a Resume That Actually Stands Out**
  - ATS doesn't matter when human eyes are guaranteed to see your resume
  - Consider printing on nice paper!
- **Don't Talk To Your Top Choice First**
  - Warm up with some of the other options first
- **Don't Only Ask About Job Openings**
  - This makes the interaction feel transactional
- **Do not** say "I'm **first year** standing"
  - Understand you are competing with upper-year students

CARLETON COMPUTER SCIENCE SOCIETY

LinkedIn

CARLETON COMPUTER SCIENCE SOCIETY

Why LinkedIn “Matters”

- **Recruiters / Interviewers will look**
  - After career events
  - When they see your resume

- **You can connect with recruiters**
  - The modern version of handing your resume in by hand
  - Less effort than an email / cover letter / follow up

- **Your activity “raises you” in recruiter search results**

Matthew MacRae-Bovell • 11:19 PM

Hi [redacted]! My name is Matthew and I’m a computer science student who would love to intern with [redacted]. I'm currently searching for a Software Developer co-op for the upcoming summer and fall terms. I'm experienced with Ruby on Rails, React and Java. I would love to chat if you're free!

CARLETON COMPUTER SCIENCE SOCIETY

Find and connect with recruiters, devs, and managers!

Home | About | Posts | Jobs | Life | People

People you may know

Jody Hisko · 2nd
Campus Talent Acquisition Associate at Kinaxis - Helping...
5K followers • Julien Leclair-Dionne, Tom Trottier, and 71 other mutual connections
Follow

Alto Wong · 2nd
Talent Connector | HR Consultant | LinkedIn Coach
Provides services - Career Development Coaching, Interview Preparation, Resume Review, HR...
Connect

Kate H. · 2nd
Talent Acquisition Specialist at Kinaxis
Lori Johns, Jamie Strahl, and 24 other mutual connections
Connect

Heather Irwin, ... · 2nd
Global Talent Operations | Talent Transformation | Human...
9K followers • Rob Villeneuve, Julien Leclair-Dionne, and 84 other mutual connections
Follow

Stefanie Hosick · 2nd
VP, Human Resources at Kinaxis
Amy Wojcicki, Steven Reid, and 95 other mutual connections
Connect

Nur Tarulli · 2nd
Talent Acquisition
2K followers • Vivek Nagabushanam, Tobi Oluwole, and 2 other mutual connections
Follow

CARLETON COMPUTER SCIENCE SOCIETY

Reach out after or even before!

[redacted], **CHRP** (She/Her) · 1st

Recruitment | Co-ops & Internships | Product Development

SEP 25, 2019

Matthew MacRae-Bovell (He/Him) • 3:00 PM

Hello! my name is Matthew MacRae-Bovell and I'm a 2nd-year Carleton computer science student. I just saw your post about Kinaxis attending the Waterloo career fair, and was wondering if Kinaxis was planning to come to Carleton and when Kinaxis normally starts hiring students for the summer.

OCT 2, 2019

[redacted] **CHRP** (She/Her) • 9:04 PM

Hi Matthew. We are attending Day 1 of Carleton University's Fall Career Fair on Wednesday October 16th from 10am – 3pm in Alumni Hall – Athletics Centre. We start posting to Carleton in January 2020 for summer coops. See you in a couple of weeks!

CARLETON COMPUTER SCIENCE SOCIETY

Another Example...

APR 6

Matthew MacRae-Bovell (He/Him) • 10:52 AM

[redacted]a! I just saw your post regarding a role working on Zapier's Runner team and I'm very interested! I currently work on Shopify's automation platform "Shopify Flow" where I've worked on both our core engine and developer platform. Would love to connect and learn more about the role!

[redacted] (He/Him) • 10:

Hey Matthew, I wanted to acknowledge your impressive skill set and express my appreciation for your interest in our team at Zapier. Allow me to provide you with a brief overview of the Runner team.

Our team is responsible for one of the core systems at Zapier and consists of 5 engineers, 1 product manager, and 1 engineering manager in the AMER timezone (ET, CT, and PT). We're looking for a new team member to f osition, with an ideal start date in May 2023. The team is looking for

Latest message

Write a message...

GIF

Send

CARLETON COMPUTER SCIENCE SOCIETY

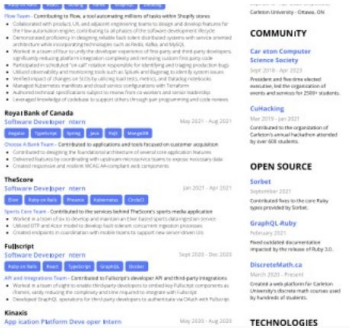
Profile Tips

CARLETON COMPUTER SCIENCE SOCIETY

Add “Featured” Links

Featured

Document



Resume - April 2023

Link

Github Profile
GitHub

Link

Matthew MacRae-Bovell's Portfolio
matthewmacraebovell.com
Matthew MacRae-Bovell's personal website.

CARLETON COMPUTER SCIENCE SOCIETY

Add “links” and skills

(Make it look full)

Software Engineer II
Jobber
May 2023 - Present · 6 mos
Ottawa, Ontario, Canada · Hybrid

Software Developer
Shopify
Sep 2021 - Apr 2023 · 1 yr 8 mos
Ottawa, Ontario, Canada

Working as a member of the Flow Team, enabling the automation of millions of merchant tasks each day.
...
...see mo

Skills: Microservices · React.js · Ruby on Rails · Kafka · Golang · Datadog · Splunk · GraphQL

Software Developer
RBC · Internship
May 2021 - Aug 2021 · 4 mos
Toronto, Ontario, Canada

Worked as a member of the "Choose a Bank" journey, a development group focused on customer acquisition....
...see mo

Skills: Microservices · Angular · Spring Framework · TypeScript · RxJS · NgRx · Java

RBC OMNI

CARLETON COMPUTER
SCIENCE SOCIETY

rocketreach.co

CARLETON COMPUTER SCIENCE SOCIETY

Applying

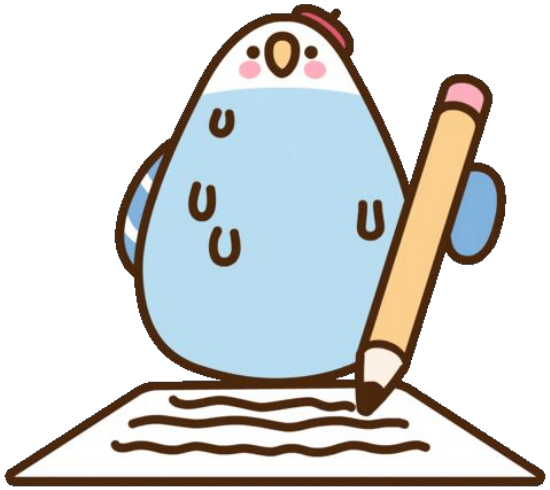
CARLETON COMPUTER
SCIENCE SOCIETY

Resumes

CARLETON COMPUTER SCIENCE SOCIETY

“Objective” Resume Advice

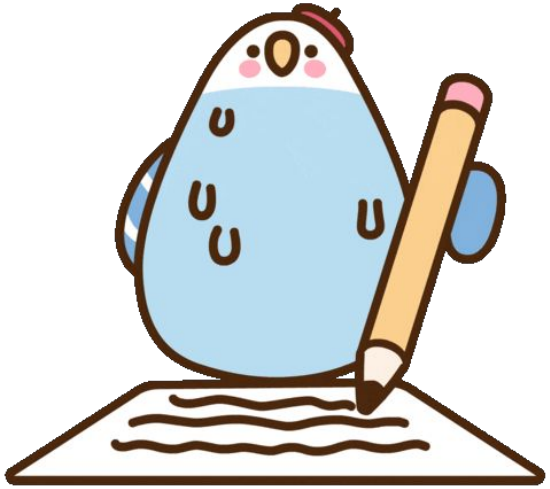
- **SAR = Situation. Action. Result.**
  - What did you do? What skills did you use? What came of it?
- **Make sure your resume scans and prints**
  - Two Columns Might not parse as well as single column
  - Some resume parsers try to read horizontally
- **Grammar + Spelling Check - Just do it...**



CARLETON COMPUTER SCIENCE SOCIETY

“Objective” Resume Advice

- **Look At Everyone Else**
  - Find the resume of a student who got into a company you want to work for
  - /r/csmajors
- **Don’t take advice from just one person**
  - What works for someone, might not work for everyone
- **Technical vs Non Technical**
  - Your resume needs work for both technical and non technical audiences



CARLETON COMPUTER SCIENCE SOCIETY

Why I DON'T Like the Co-op "Combined" Resume

COMBINED RESUMES

NAME
Address
City, Province, Postal Code
Phone Number Email address

CAREER OBJECTIVE (Optional)
The objective is your opportunity to highlight the contribution you can make to the employer. Explain why your academic background, employment experience and skills make you an excellent candidate. **The objective should be customized to each particular position.** This section must be clear and well written. Avoid using personal pronouns. *You can also substitute or add a Skills Profile here*.

EDUCATION
Title of Degree **20xx – Present**
Carleton University, Ottawa, ON
- Relevant courses/Special projects: (optional)
- Title of thesis:
- Scholarships, awards, Dean's List

SKILLS AND ABILITIES/SKILLS SUMMARY
This section allows you to use 2 or 3 subtitles to divide your experiences into areas of skills, such as communication skills, analytical skills, management skills, technical skills, interpersonal skills, etc. To determine what skills to highlight, consider what the employer's needs are for the position you are seeking. Your experience can come from paid positions, volunteer work, or academics.

Communication Skills
- Effectively wrote summer students' progress reports relating to…..
- Independently presented a seminar on…..
- Accurately advised senior staff regarding……

Analytical Skills
- Researched….. resulting in a publication on……..
- Conducted focus groups resulting in successful marketing strategies on……..
- Surveyed…… resulting in an A+ research paper which was presented…….

Management Skills
- Trained student staff on safety procedures resulting in fewer accidents during……..
- Successfully co-ordinated a meet and greet gathering for students in….
- Effectively supervised volunteers to assist with a successful fundraiser for…..

COMBINED RESUMES

WORK EXPERIENCE
List previous or current positions that are related to the job you are currently seeking in reverse chronological order (i.e. most recent first and work backwards). You may list some of the skills you acquired in these positions but the majority of your relevant skills and experiences should be included under your 'Skills and Abilities' section. Do include your job title, place of employment, geographic location and related dates. Use complete **accomplishment based statements.**

Title of Position **20xx-20xx**
Name of Company/Organization, City, Province/Country
- Begin your statements with action words (i.e. developed, delivered, researched, conducted, contacted, constructed, assembled, computed, designed, installed, etc.)
- If you are currently doing the job, use present tense action verbs (i.e., conduct presentations). If the job listed was done in the past, use past tense action verbs (i.e., conducted presentations).

VOLUNTEER EXPERIENCE (Optional)
This section may be omitted if its content is not relevant. You may also include your volunteer work under your "Extra-curricular Activities" heading. Follow the guidelines used for outlining your "Work Experience" above and include the title of your position, the name of the organization and the dates you were associated with this organization.

Title of Volunteer Position **20xx-Present**
Name of Company/Organization, City, Province/Country
- Include 3-5 bullet points of accomplishment based statements to describe what you did, how you did it, etc.

APPLIED PROJECTS (Optional)
In this section you can highlight any major projects, assignments, or presentation you may have completed during your studies that have provided you with some practical experience. Discuss the problem or challenge, the technology and technical skills involved, methods used and results obtained.

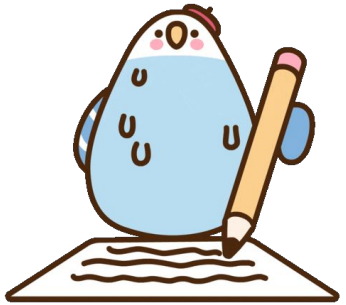
Title of Project/Topic **Fall 20xx**
Course title (COURSE CODE -optional)/Department, Carleton University, Ottawa, ON
- Include 3-5 bullet points of accomplishment based statements to describe what you did, how you did it, what technologies or techniques you used, etc.

EXTRA-CURRICULAR ACTIVITIES (Optional)
Can include **current** volunteer work (if not including a volunteer experience section), as well as sports activities, hobbies, club/group memberships. Include your student memberships in professional organizations such as CIPS, IEEE, Commerce Society, etc. Try to avoid listing activities from high school as your list should be **current**. Extra- curricular activities can demonstrate: teamwork skills, leadership abilities (i.e., Club President, Team Captain), time management (i.e., balancing academic and recreational activities), organizational skills (i.e., planning events).
- Member, Student Association of Career Development, 20XX

CARLETON COMPUTER SCIENCE SOCIETY

Combined Resume Issues

- Two pages Is **not necessary** for students with zero experience
- Students often duplicate information between “skills sections” and “experience sections”



Jake's Resume

Jake Ryan

123-456-7890 | jake@su.edu | linkedin.com/in/jake | github.com/jake

Education

Southwestern University — Georgetown, TX
Bachelor of Arts in Computer Science, Minor in Business — *Aug. 2018 – May 2021*

Blinn College — Bryan, TX
Associate's in Liberal Arts — *Aug. 2014 – May 2018*

Experience

Undergraduate Research Assistant — June 2020 – Present
Texas A&M University — *College Station, TX*
- Developed a REST API using FastAPI and PostgreSQL to store data from learning management systems
- Developed a full-stack web application using Flask, React, PostgreSQL and Docker to analyze GitHub data
- Explored ways to visualize GitHub collaboration in a classroom setting

Information Technology Support Specialist — Sep. 2018 – Present
Southwestern University — *Georgetown, TX*
- Communicate with managers to set up campus computers used on campus
- Assess and troubleshoot computer problems brought by students, faculty and staff
- Maintain upkeep of computers, classroom equipment, and 200 printers across campus

Artificial Intelligence Research Assistant — May 2019 – July 2019
Southwestern University — *Georgetown, TX*
- Explored methods to generate video game dungeons based off of *The Legend of Zelda*
- Developed a game in Java to test the generated dungeons
- Contributed 50K+ lines of code to an established codebase via Git
- Conducted a human subject study to determine which video game dungeon generation technique is enjoyable
- Wrote an 8-page paper and gave multiple presentations on-campus
- Presented virtually to the World Conference on Computational Intelligence

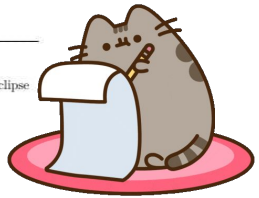
Projects

Gitlytics | *Python, Flask, React, PostgreSQL, Docker* — June 2020 – Present
- Developed a full-stack web application using with Flask serving a REST API with React as the frontend
- Implemented GitHub OAuth to get data from user's repositories
- Visualized GitHub data to show collaboration
- Used Celery and Redis for asynchronous tasks

Simple Paintball | *Spigot API, Java, Maven, TravisCI, Git* — May 2018 – May 2020
- Developed a Minecraft server plugin to entertain kids during free time for a previous job
- Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review
- Implemented continuous delivery using TravisCI to build the plugin upon new a release
- Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin

Technical Skills

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI
Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib



Awesome CV

Byungjin Park

Software Architect · Security Expert

42-8, Bangbae-ro 15-gil, Seocho-gu, Seoul, 00681, Rep. of KOREA
(+82) 10-9030-1843 | posquit0.bj@gmail.com | www.posquit0.com | posquit0 | posquit0

"Be the change that you want to see in the world."

Summary

Current Site Reliability Engineer at start-up company Kasa. 7+ years experience specializing in the backend development, infrastructure automation, and computer hacking/security. Super nerd who loves Vim, Linux and OS X and enjoys to customize all of the development environment. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools if the need arises.

Work Experience

Omnious. Co., Ltd. — Seoul, S.Korea
Software Architect — Jun. 2017 - May. 2018
- Provisioned an easily managable hybrid infrastructure(Amazon AWS + On-premise) utilizing IaC(Infrastructure as Code) tools like Ansible, Packer and Terraform.
- Built fully automated CI/CD pipelines on CircleCI for containerized applications using Docker, AWS ECR and Rancher.
- Designed an overall service architecture and pipelines of the Machine Learning based Fashion Tagging API SaaS product with the micro-services architecture.
- Implemented several API microservices in Node.js Koa and in the serverless AWS Lambda functions.
- Deployed a centralized logging environment(ELK, Filebeat, CloudWatch, S3) which gather log data from docker containers and AWS resources.
- Deployed a centralized monitoring environment(Grafana, InfluxDB, CollectD) which gather system metrics as well as docker run-time metrics.

PLAT Corp. — Seoul, S.Korea
Co-founder & Software Engineer — Jan. 2016 - Jun. 2017
- Implemented RESTful API server for car rental booking application(CARPLAT in Google Play).
- Built and deployed overall service infrastructure utilizing Docker container, CircleCI, and several AWS stack(Including EC2, ECS, Route 53, S3, CloudFront, RDS, ElastiCache, IAM), focusing on high-availability, fault tolerance, and auto-scaling.
- Developed an easy-to-use Payment module which connects to major PG(Payment Gateway) companies in Korea.

R.O.K Cyber Command, MND — Seoul, S.Korea
Software Engineer & Security Researcher (Compulsory Military Service) — Aug. 2014 - Apr. 2016
- Lead engineer on agent-less backtracking system that can discover client device's fingerprint(including public and private IP) independently of the Proxy, VPN and NAT.
- Implemented a distributed web stress test tool with high anonymity.
- Implemented a military cooperation system which is web based real time messenger in Scala on Lift.

NEXON — Seoul, S.Korea & LA, U.S.A
Game Developer Intern at Global Internship Program — Jan. 2013 - Feb. 2013
- Developed in Cocos2d-x an action puzzle game(Dragon Buster) targeting U.S. market.
- Implemented API server which is communicating with game client and In-App Store, along with two other team members who wrote the game logic and designed game graphics.
- Won the 2nd prize in final evaluation.

ShitOne Corp. — Seoul, S.Korea
Software Engineer — Dec. 2011 - Feb. 2012
- Developed a proxy drive smartphone application which connects proxy driver and customer.
- Implemented overall Android application logic and wrote API server for community service, along with lead engineer who designed bidding protocol on raw socket and implemented API server for bidding.

SAMSUNG Electronics — S.Korea
Freelance Penetration Tester — Sep. 2013, Mar. 2011 - Oct. 2011
- Conducted penetration testing on SAMSUNG KNOX, which is solution for enterprise mobile security.
- Conducted penetration testing on SAMSUNG Smart TV.

Honors & Awards

International

CARLETON COMPUTER SCIENCE SOCIETY

“Should I put my (non technical job) on my resume?”

- It’s evidence that someone hired you!
- Can be used to highlight relevant comms / people skills like
  - Leadership
  - Mentorship
  - Ownership
- Less valuable than relevant technical experience, but it’s a case by case type question

CARLETON COMPUTER SCIENCE SOCIETY

“What do I put on my resume if I don’t have anything?”

- **Projects** - great way to show experience with technologies without having paid experience
    - Could be an app, game, website, or anything you’ve built that is relevant to the job!
    - Don’t have any projects? - Word your school work into projects
        - Yes, this is dangerous because recruiters are going to see the same projects
    - Don’t have any projects from school? - Copy a Youtube tutorial / project (self learning)
- Add extra-curriculars
- Add Interests
- Have really pretty spacing. Make it minimalistic.

CARLETON COMPUTER SCIENCE SOCIETY

COMP 2401

Concurrency, Multithreading

TCP, UDP, Client-Server

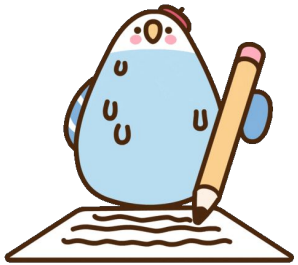
Actor Model

COMP 3000

Software Reliability

Linux

VMs, Environment Consistency



COMP 3005

SQL & Relational Database

Entity Relation Diagrams & Database Design

CARLETON COMPUTER SCIENCE SOCIETY

COMP 2404

Design Patterns

UML Diagrams

Software Engineering Principles - SOLID

COMP 3004

GOF Patterns

UML Diagrams

Collaborative Coding

COMP 2406

Client-Server, REST APIs, Websockets

HTML, CSS, JavaScript

Database Management - MongoDB or SQLite

CARLETON COMPUTER SCIENCE SOCIETY

Not Sure What Skills a Company Looks For?

Check their full-time postings.

You'll likely use the same tech as full-time employees.

CARLETON COMPUTER
SCIENCE SOCIETY

Remember... You need to sell yourself using the correct skill set

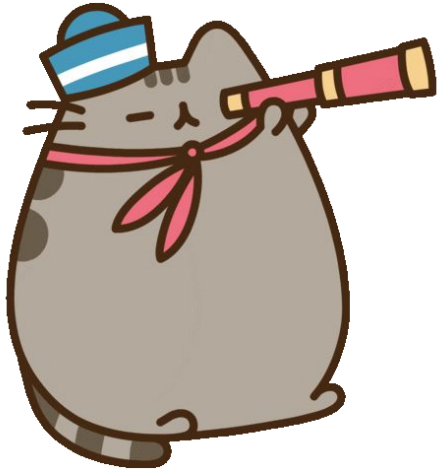
Ex: Software Eng
!= Computer Science

CARLETON COMPUTER SCIENCE SOCIETY

Software Skills to Make Your Student Resume Stand Out

Skills not emphasized in university that will help your resume stand out to developers and hiring managers

Matthew MacRae-Bovell
December 1, 2024



CARLETON COMPUTER SCIENCE SOCIETY

JOBUARY

Resume Office Hours

Get 1-on-1 feedback from accomplished computer science students

Book your timeslots for:

January 6th

January 7th

CARLETON COMPUTER
SCIENCE SOCIETY

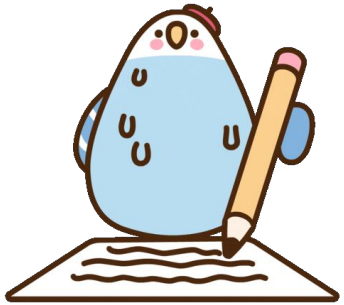
Cover Letters

CARLETON COMPUTER SCIENCE SOCIETY

Cover Letters

- **Do I Actually Need One?**
  - Could be a filter for if you cared enough to make one

- **How Long Should It Be?**
  - Tailor the length to the companies “vibe”, (ex: a startup might want you to be more genuine, big enterprise might want something formal)



CARLETON COMPUTER SCIENCE SOCIETY

Cover Letter Structure

- Paragraph 1
  - Sentence 1: Who you are, your background
  - Sentence 2: How you found the company (if applicable)
  - Sentence 3: One Sentence from the application
    - Ex: "... and I want to join {company} to help **{build the future of x}**
- Paragraph 2
  - 3-5 Sentences about your best work - projects, experience, volunteer, etc.
- Paragraph 3
  - "This {summer?}, I would love to bring my passion for development to {company}. Feel free to contact me any time via email or phone to schedule an interview."

CARLETON COMPUTER SCIENCE SOCIETY

Interviews

CARLETON COMPUTER SCIENCE SOCIETY

What Hiring a Full-Time Dev Looks Like...

You Apply

Filter OA (Online Assessment)

Optional*

Recruiter Screening Call

1-4 Technical Assessments

At Least One Call With Your Hypothetical Manager or Team

A Final Call With Offer

CARLETON COMPUTER SCIENCE SOCIETY

Hiring Processes Widely Vary Between Companies For Hiring Interns / Students

CARLETON COMPUTER
SCIENCE SOCIETY

Interview Types

Apps | SUMO - Stanfo... | Reading list

41m left

return its smallest divisor greater than 1.

Example

n = 24

The number *24* is not prime: its divisors are *[1, 2, 3, 4, 6, 8, 12, 24]*. The smallest divisor greater than *1* is *2*.

Function Description

Complete the function *isPrime* in the editor below.

isPrime has the following parameter(s):

long n: a long integer to test

Returns

int: if the number is prime, return *1*; otherwise returns the smallest divisor greater than *1*

Constraints

- $2 \le n \le 10^{12}$

▸ **Input Format for Custom Testing**

▾ **Sample Case 0**

Sample Input 0

```
STDIN       Function
-----       --------
2       →   n = 2
```

Sample Output 0

```
1
```

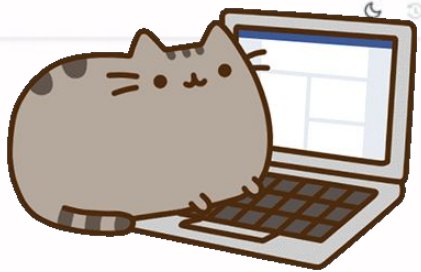
Explanation 0

As *2* is a prime number, the function returns *1*.

▸ **Sample Case 1**

Language: Python 3 | Autocomplete Disabled

```
11  # Complete the 'isPrime' function below.
12  #
13  # The function is expected to return an INTEGER.
14  # The function accepts LONG_INTEGER n as parameter.
15  #
16
17  def isPrime(n):
18      flag=True
19      for i in range(2,n):
20          if n%i==0:
21              flag=False
22              break
23      if flag==False:
24          return i
25      else:
26          return 1
27  if __name__ == '__main__':
```



Line: 26 Col: 17

Test Results | Custom Input | Run Code | Run Tests | Submit

Compiled successfully. Run all test cases

Input (stdin)

```
2
```

Your Output (stdout)

```
1
```

Expected Output

```
1
```

Time-based code challenge (Online Assessment / OA)

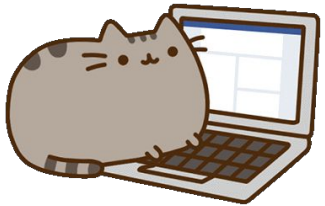
CARLETON COMPUTER SCIENCE SOCIETY

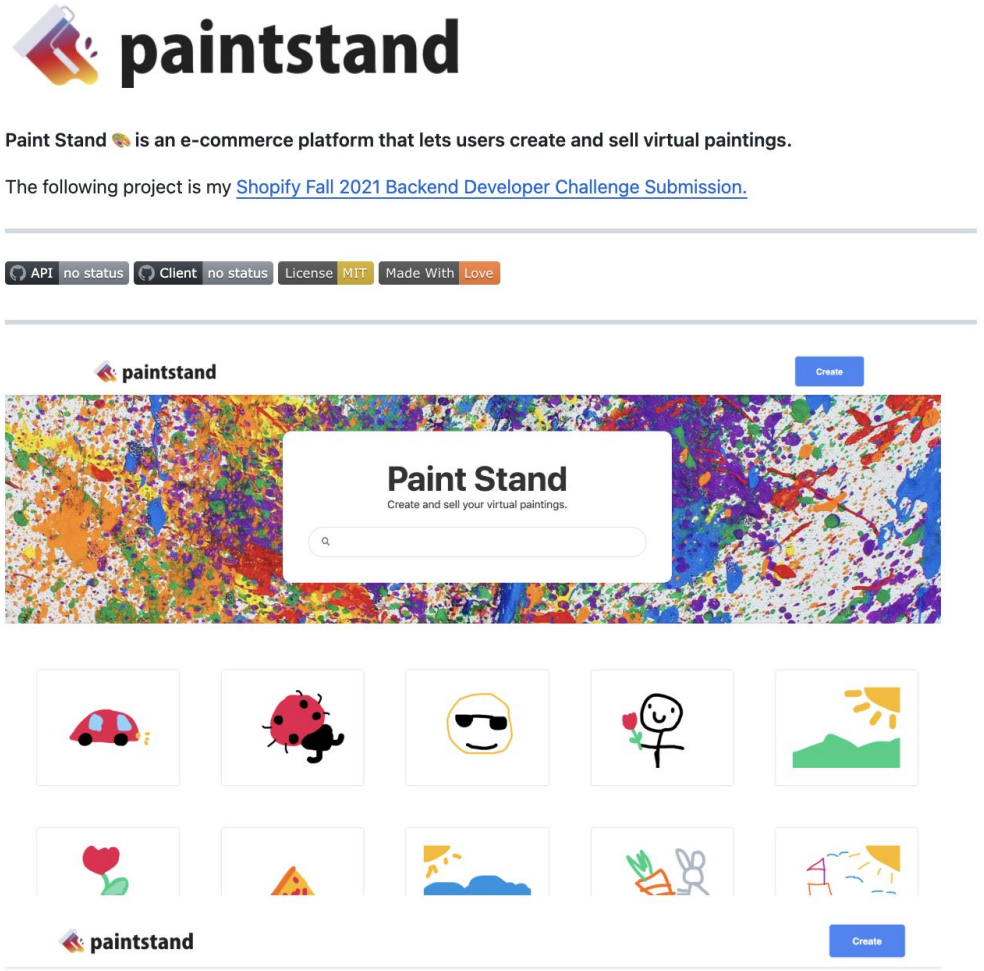
Take Home Assessments

Asynchronous complete some challenge

Examples:

- Build a project given a set of requirements
- Leave comments on a sample PR





CARLETON COMPUTER SCIENCE SOCIETY

Recruiter Screening Calls

Typically brief (15–30 minutes) to evaluate whether a candidate is a good fit for the role before moving them to a stage that takes away engineering time.

One kind of interview referred to as a “behavioural interview”

Interview will likely ask:

- Overview of your relevant skills and background.
- Why this role/company?
- Start date and schedule flexibility.
- Salary expectations.
- Legal work status or visa needs.
- Address gaps, relocations, or potential concerns
- Do you fit company culture

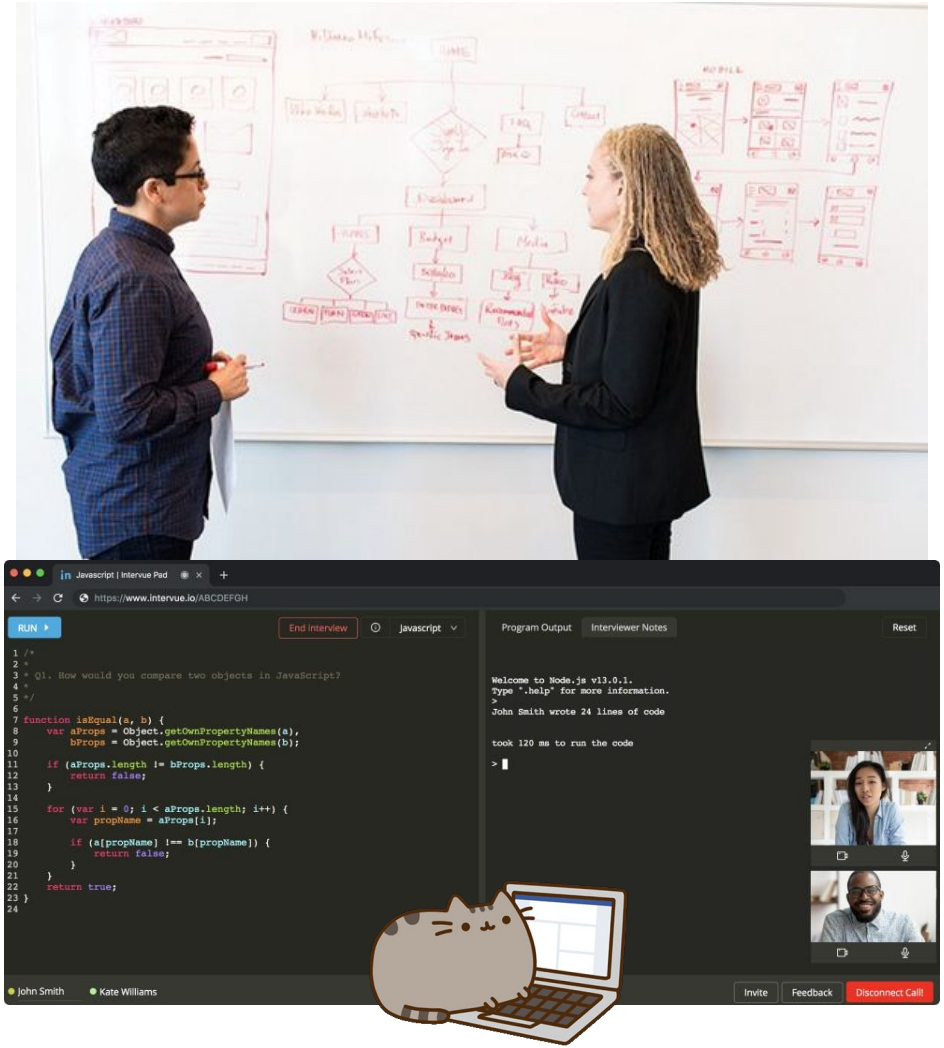
CARLETON COMPUTER SCIENCE SOCIETY

White Board Interviews

Conducted in real-time with at least one engineer present. Might take place on a physical whiteboard, a shared document, or an online coding environment.

- Algorithm Based Questions
- Pair Programming Task
- System Design Exercises

These interviews are about assessing you ability to communicate and whether you're someone good to work with...

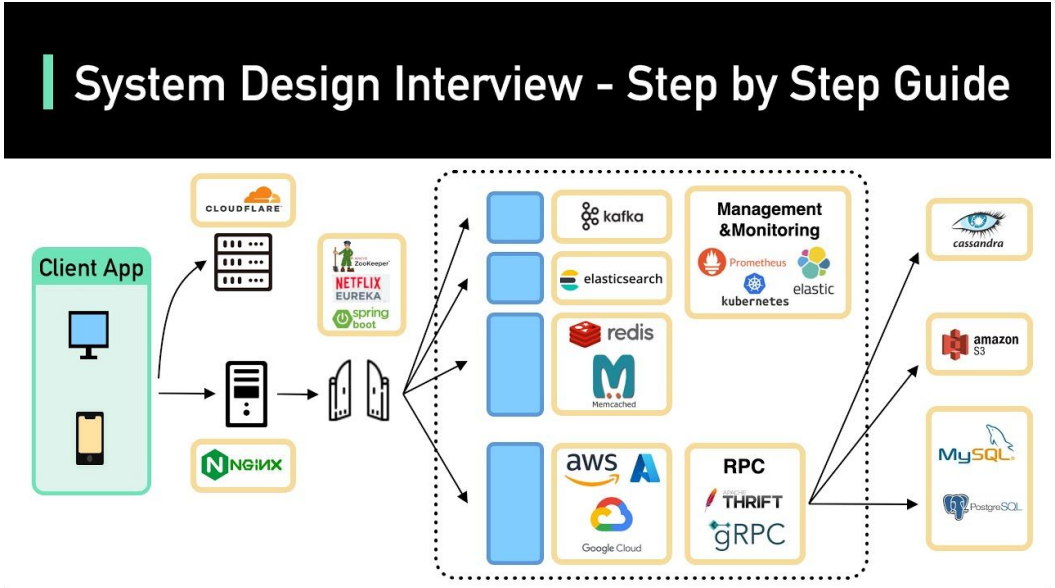


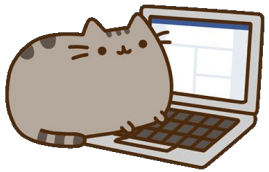
CARLETON COMPUTER SCIENCE SOCIETY

System Design Questions

- How would you design a ride-sharing app like Uber?
- How would you architect a video streaming platform like YouTube?
- How would you design a search engine like Google?
- How would you design a file sharing platform like Google Drive?

Very uncommon in student interviews*





CARLETON COMPUTER SCIENCE SOCIETY

Purely Oral Technical Interview

Developers or engineering managers asking you technical questions, possibly derived from your resume to get a grasp of your experience and background.

Relatively common for students*

CARLETON COMPUTER SCIENCE SOCIETY

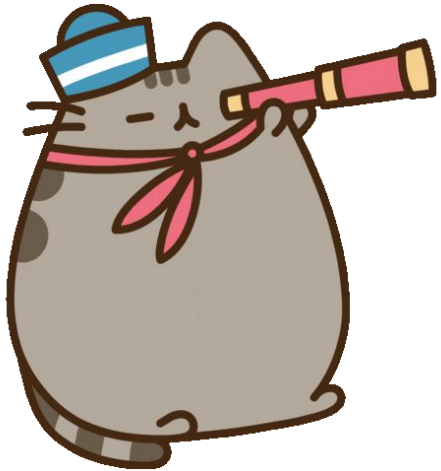
How Should You Prepare For Interviews?

CARLETON COMPUTER SCIENCE SOCIETY

Is LeetCode Worth Doing?

A breakdown of why LeetCode exists and why it's not the only way you should prepare for interviews

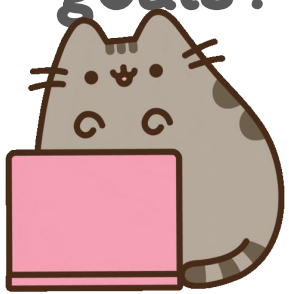
Matthew MacRae-Bovell
December 25, 2024



CARLETON COMPUTER SCIENCE SOCIETY

“Is LeetCode worth doing?”

The amount of LeetCode practice you need **depends entirely on your goals**.



CARLETON COMPUTER SCIENCE SOCIETY

They are Algorithm based questions... essentially **Math problems.**

They **do not** evaluate practical skills like whether you can actually build software.

CARLETON COMPUTER SCIENCE SOCIETY

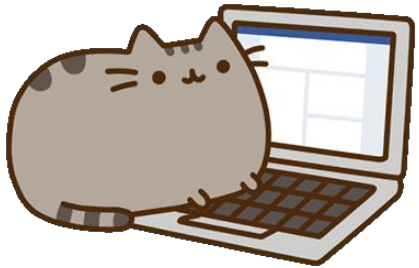
Why Do Algorithm Based Questions Exist?

Large FAANG companies determined through interview research that the smartest candidates were ones who were best at algorithms .

Smaller companies copied the hiring practice.

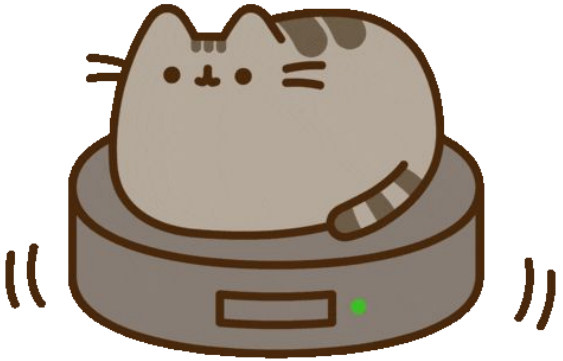
CARLETON COMPUTER SCIENCE SOCIETY

My Interview Preparation Advice



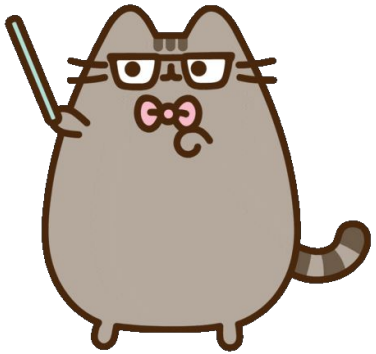
CARLETON COMPUTER SCIENCE SOCIETY

Check Reddit and Glassdoor for previous interview experiences.



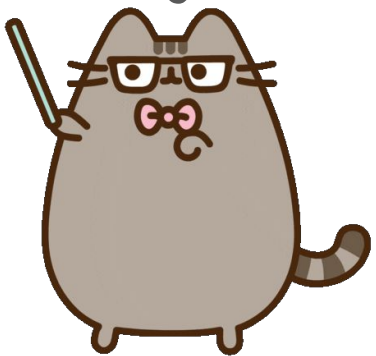
CARLETON COMPUTER SCIENCE SOCIETY

At the very least, you need to practice enough to confidently code under pressure using one common programming language.



CARLETON COMPUTER SCIENCE SOCIETY

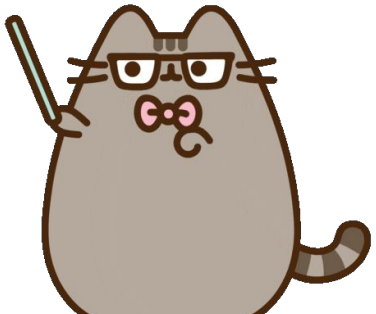
You should practice code problems on a variety of platforms instead of just LeetCode to avoid becoming overly comfortable with the LeetCode question style.



CARLETON COMPUTER SCIENCE SOCIETY

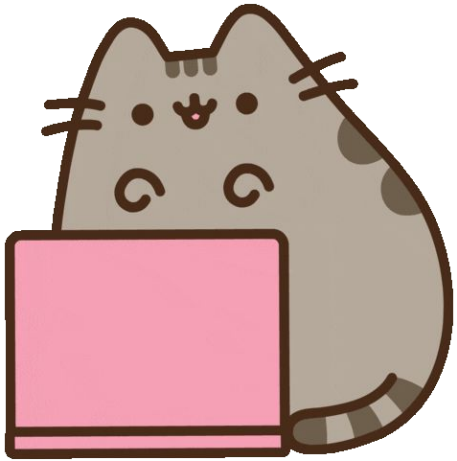
Most students need to practice technical communication.

While algorithm-based questions (like those on LeetCode) will be present in **SOME** technical interviews, your ability to communicate technical concepts, will be assessed in **ALL** technical hiring processes.



CARLETON COMPUTER
SCIENCE SOCIETY

Build Real Projects



CARLETON COMPUTER SCIENCE SOCIETY

Thank You!

Questions?