

CRACKING THE CODE: TIPS FOR TECHNICAL INTERVIEW SUCCESS

D2L



UNIVERSITY OF
WATERLOO

Centre for Career
Development



WHOSE LAND ARE WE ON?

We respectfully acknowledge that we work on the traditional territory of the Attawandaron (Neutral), Anishnaabeg, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, which includes ten kilometers on each side of the Grand River: land promised and never returned to the Six Nations.

Support: O:se Kenhionhata:tie – [Land Back Camp](#), @ose.kenhionhatatie on IG

Reports: [TRC Calls to Action](#), [National Inquiry into MMIWG](#)

Reading: [21 Things You May Not Have Known About the Indian Act](#), [This Place: 150 Years Retold](#)

What land are you on? [native-land.ca](#)

Office of Indigenous Relations

February 2: Indigenous Speaker Series presents Kim Tallbear

February 11: Cultivating Climate Activism through Storytelling and Art with Guest Speaker Isaac Murdoch

February 12: [Have a Heart Day](#) @ School of Architecture, Cambridge



AGENDA

- About the Centre for Career Development
- All about D2L
- Technical Interview Demo
- Panel
- Question & Answer Period

CAREER SUPPORTS @ CENTRE FOR CAREER DEVELOPMENT

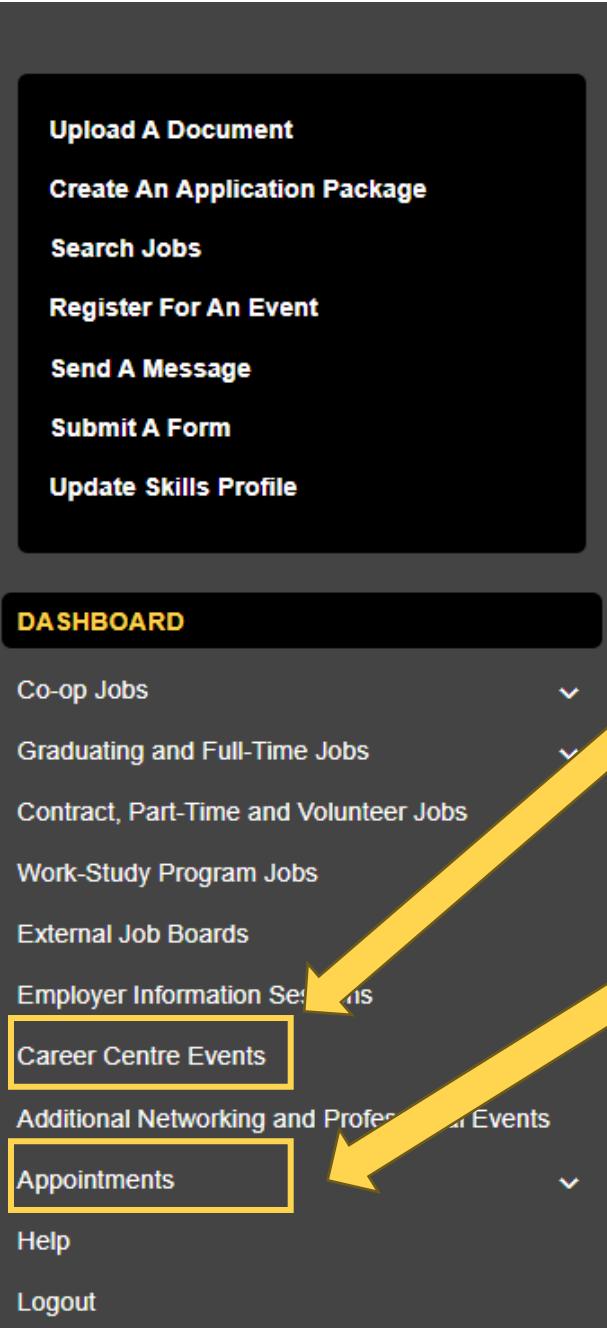
About Us

- Team of Career Advisors dedicated to support undergraduate and graduate students
- Support students throughout their academic career navigating co-op and career
- Provide appointments and workshops to all students on:
 - Job Search
 - Résumé & Cover Letter Reviews
 - Interview Support
 - Further Education
 - Career Planning



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WATERLOO

WATERLOOWORKS: NOT JUST FOR JOB POSTINGS



WaterlooWorks is your hub for many things!

- You can interact with the Centre for Career Development by checking out our workshops and events
- Book appointments and drop-ins

Learn more and connect with us:
<https://uwaterloo.ca/career-development>

ALL ABOUT D2L

CRACKING THE CODE:
Tips for technical interview success

D2L



Introducing ourselves!



Alex Whitelaw
Early Talent Acquisition Associate
1.5 years at D2L



Andrew Alkema
Senior Software Developer
13 years at D2L

D2L

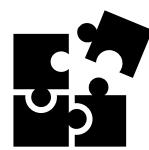
Our Organization

D2L at a Glance



WHERE WE BEGAN

Founded in 1999
by John Baker
(26 years!)



EMPLOYEE BASE

Over 1000
employees
globally



BRIGHTSPACE USERS

Over 20 million
and counting!



BRIGHTSPACE CUSTOMERS

1400+
customers in
over 40
countries across
6 continents

D2L MISSION

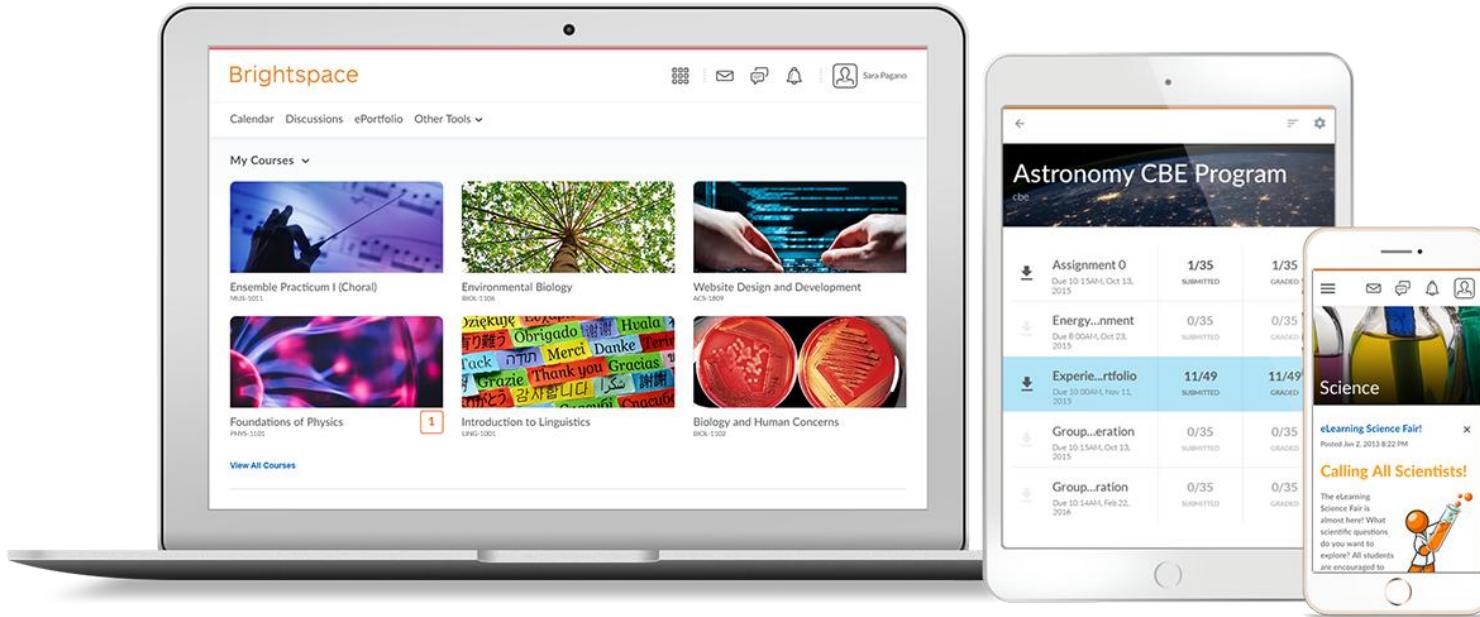
“To **transform** the way
the world learns.”

D2L VISION

“We believe in a better
world where learning can be
accessible, engaging and
inspiring.”

Our Flagship Product

D2L BRIGHTSPACE



D2L is a **learning company** focused on customer-centred solutions. Technology is an important piece of what we offer; we deliver value through the software **in the moment of learning.**

You might know Brightspace as Waterloo LEARN!



D2L

All about Co-op

What does D2L's Co-op Program look like?

We hire 20-25 co-ops each term

We offer a wide variety of co-op roles, including software & test development, IT, user experience, marketing, sales, graphic design, and more!

We hire co-ops out of D2L offices in Kitchener, Toronto, Vancouver, and Winnipeg.

We have co-op students year-round, for Fall, Winter, and Spring terms

The best place to find our co-op roles is on our Careers page at [d2l.com](https://d2l.com/careers)

What makes Co-op at D2L Awesome?

Access to senior leaders



Office amenities- gym, yoga studio, scooters



Opportunity to join ERGs (Employee Resource Groups) & Co-op Social Committee



Internet reimbursement



Two paid personal days



Opportunity to return or join full time



Technical Interviews

at D2L

What is D2L looking for?

- You can use any language or reference any tech stack (we know many software best practices are transferable)
- We are focused on how you apply your skills – not just your answers
- We are looking for how you communicate your thought processes



Remember – we're rooting for you and want you to have a positive interview experience! Even if the fit with D2L isn't quite right, we want to see you apply again.

Interview Breakdown and Demo

Breakdown of an interview

45 min long, typically in-person on campus for Waterloo candidates. In this interview you can expect:

- Discussion of Past Projects
- Code Review Question
- Coding Question

Past Projects Discussion

- Offer a summary of your experience, but be prepared to focus on one experience/project in depth
- Focus on the technical aspects of your project – what was interesting or challenging to you?
- Be clear on which parts of your work were your specific responsibility
- How do you weigh trade-offs when making a technical decision? Can you give an example?

Code Review

- Remember that no one catches all issues or defects, and some issues are subjective
- What we're looking for:
 - Good – you can identify issues
 - Better – you can identify & explain the issues
 - Best – you can identify, explain, & recommend improvements

Code Review - Demo

```
● ● ●

1 // Toggles button from blue to red
2 function toggleButton(button) {
3     const isRed = button.value === 'red';
4     const canBePressed = button.disabled === false;
5
6     if (canBePressed) {
7         if (isRed) {
8             button.value === 'blue';
9         } else {
10            button.value === 'red';
11        }
12    }
13
14    return button;
15 }
```

Coding Question

Remember that:

- The goal is to communicate and collaborate with your interviewers
- You control the narrative
- Verbalize any assumptions or decisions as you work

Pro tip: start with a brute force solution and then optimize/improve later

Coding Question - Demo

```
/*
Given an array and an
integer sum return the
number of pairs in the
array with the given
sum.
```

Example:

```
List A = [8, 7, 2, 5, 3,
1]
int sum = 10
```

```
Return = 2 // (8+2),
(7+3)
*/
```

Coding Question – Demo continued

```
/*
Given an array and an
integer sum return the
number of pairs in the
array with the given
sum.
```

Example:

List A = [8, 7, 2, 5, 3,
1]
int sum = 10

Return = 2 //(8+2),
(7+3)
*/



```
1  public int FindNumberOfPairs(List<int> numbers, int sum) {
2      int output = 0;
3
4      for (int i = 0; i < numbers.Count - 1; i++) {
5          for (int j = i + 1; j < numbers.Count; j++) {
6              if (numbers[i] + numbers[j] == sum) {
7                  output++;
8              }
9          }
10     }
11
12     return output;
13 }
```

PANEL

MEET YOUR PANELISTS

MODERATOR



SARAH BADRAN

Career Advisor,
University of Waterloo



KOMAL VACHHANI

4B Computer Engineering Student,
University of Waterloo



ALEX WHITELAW

Early Talent Acquisition Associate,
D2L



VINAYAK BECTOR

4B Computer Science Student,
University of Waterloo



ANDREW ALKEMA

Senior Software Developer,
D2L

Q&A

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THANK YOU!