

# 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





# 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>

Upload A Document

Create An Application Package

Search Jobs

Register For An Event

Send A Message

Submit A Form

Update Skills Profile

## DASHBOARD

Co-op Jobs



Graduating and Full-Time Jobs



Contract, Part-Time and Volunteer Jobs

Work-Study Program Jobs

External Job Boards

Employer Information Sessions

Career Centre Events

Additional Networking and Professional Events

Appointments



Help

Logout

# 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

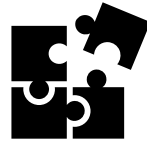


# D2L at a Glance



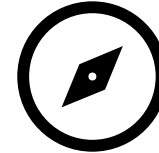
## WHERE WE BEGAN

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

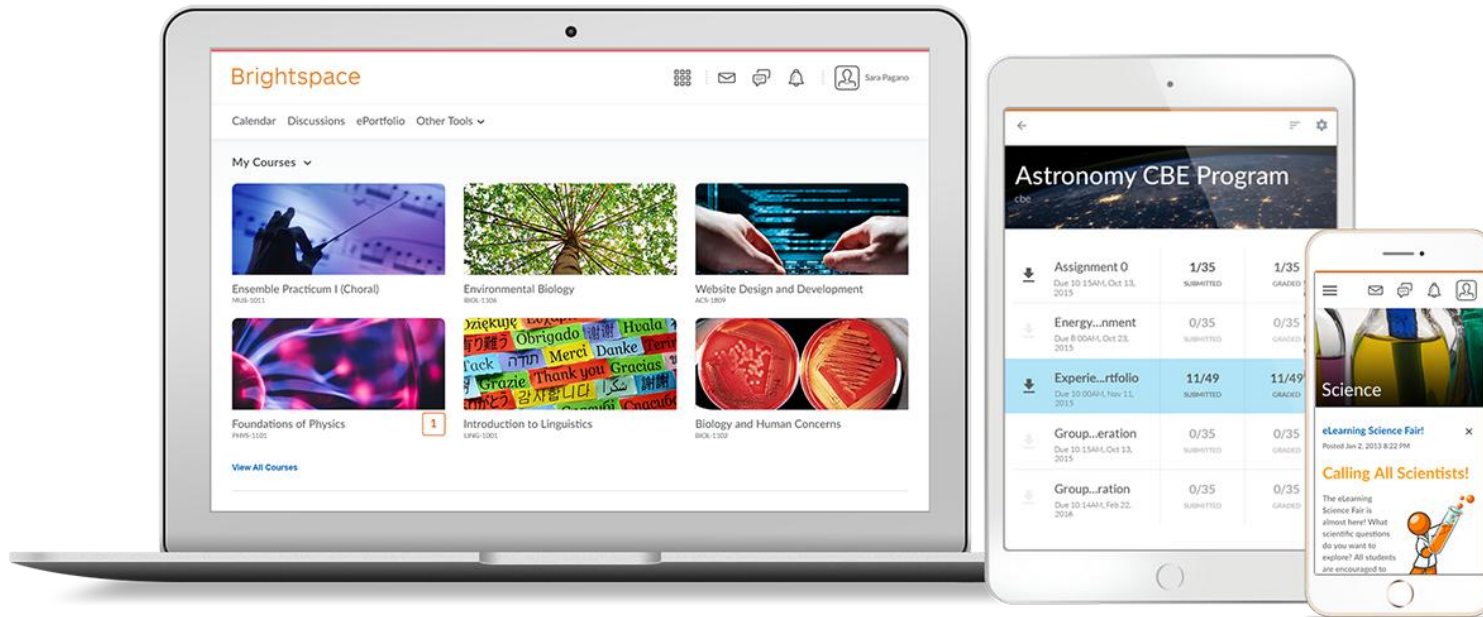
“To **transform** the way  
the world learns.”

# 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)

# What makes Co-op at D2L Awesome?

---

Access to senior leaders



Office amenities- gym, yoga studio, scooters



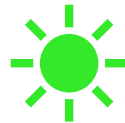
Opportunity to join ERGs (Employee Resource Groups) & Co-op Social Committee



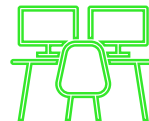
Internet reimbursement



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 UWaterloo 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



VINAYAK BECTOR

4B Computer Science Student,  
University of Waterloo



ALEX WHITELAW

Early Talent Acquisition Associate,  
D2L



ANDREW ALKEMA

Senior Software Developer,  
D2L



**Q&A**

D2L

UNIVERSITY OF  
WATERLOO



THANK YOU!