

# Lecture 1

# Introduction

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UNIVERSITY OF AUCKLAND

COMPSCI 289

Prof. Robert Amor

Prof. Jim Warren

# COMPSCI 289

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- A brand new course!
  - Developed specifically for BAdvSci (CS)
  - Looking at Computer Science research and futures
- **Research Seminar in Computer Science**
- An introduction to research topics in Computer Science. Students will be expected to prepare and deliver a review of research in a topic of their choice. Research articles will be provided during the course, and will consist of key scientific publications.

# Who are we?

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- Prof Jim Warren

- [jim@cs.auckland.ac.nz](mailto:jim@cs.auckland.ac.nz)
- Ext: 86422
- Room: 303S.483
- Office hours: by appointment
- Research: Health information systems, data analytics, e-therapy



- Prof Robert Amor

- [trebor@cs.auckland.ac.nz](mailto:trebor@cs.auckland.ac.nz)
- Ext: 83068
- Room: 303.401
- Office hours: by appointment
- Research: Computing for architecture, engineering, construction and facility management



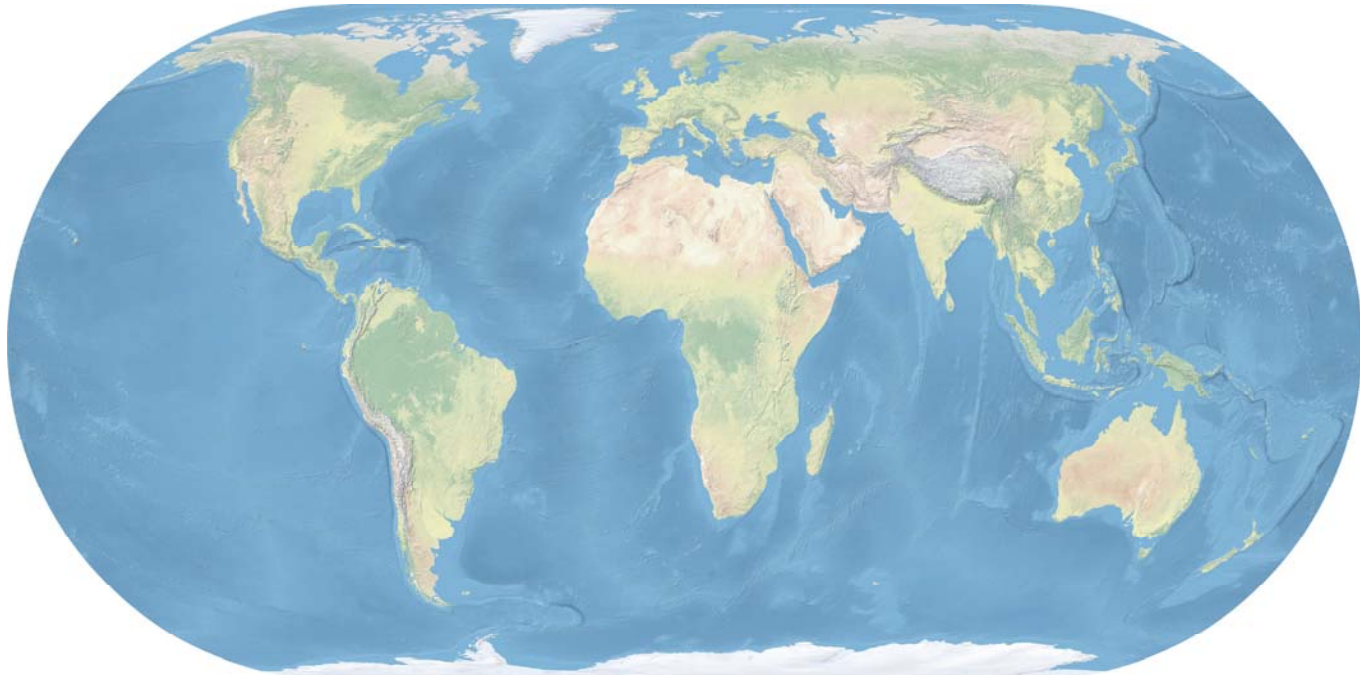
# Who are you?

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- Name
- From



[https://commons.wikimedia.org/wiki/File:New\\_Zealand\\_relief\\_map.jpg](https://commons.wikimedia.org/wiki/File:New_Zealand_relief_map.jpg)



By Ktrinko - Own work, CC0, <https://commons.wikimedia.org/w/index.php?curid=17169364>

- Two truths and one lie

# Learning objectives

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- Analyse research literature in Computer Science
- Prepare and deliver an oral presentation on an advanced topic in Computer Science
- Review an oral presentation on an advanced topic in Computer Science
- Learn how to prepare a research report on a Computer Science topic
- Understand recent research advancements in Computer Science

# How to achieve the learning objectives?

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- Lectures on research literature
- Research group presentations
- Your research paper individual seminar presentations
- Seminar reviews
- Group research area report
- No test or exam

# Class structure

Week	Topics
1 (27 Jul)	Introduction, Research in CS, Finding literature
2 (3 Aug)	Reading & Summarising literature, Presentation skills
3 (10 Aug)	Artificial Intelligence, Machine Learning, Health Informatics
4 (17 Aug)	Computational Biology, Networks, Vision & Graphics
5 (24 Aug)	Student presentations
6 (31 Aug)	Student presentations
Mid-semester	
Mid-semester	
7 (21 Sep)	Student presentations
8 (28 Sep)	Software Engineering, Cybersecurity, Human-Computer Interaction
9 (5 Oct)	Education, Parallel Computing, Theory
10 (12 Oct)	Student presentations
11 (19 Oct)	Student presentations
12 (26 Oct)	Student presentations

# Class structure

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- Lectured classes
  - 50 minute lecture with activities
- Research group presentation classes
  - 20 minute presentation
  - 30 minute discussion and question activities
- Student presentation classes
  - 1 presentations per hour
    - 20 minute presentation
    - 30 minute questions



# Weekly structure

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- Monday 9-11am
  - G15, Maths & Physics Building
  - Short break after 1 hour and finish earlier?
    - 9:05-9:55 and 10:00-10:50?
  - Need normal times for research group days
- Tuesday 10-11am
  - G15, Maths & Physics Building

# Assessments

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- Individual seminar (30%)
  - Present a research paper to the class
    - 5pm, Tuesday 28 July, choose research papers
    - 9am, Thursday 30 July, research paper confirmed
    - 5pm, Sunday 23 August, presentation and handout submitted
- Seminar review (10%)
  - Review three (3) individual seminars
    - 5pm, Friday 30 October, 3 reviews submitted
- Group report (60%)
  - Write a report on four (4) research papers
  - Groups of two (2)
    - 5pm, Friday 28 August, choose research area and group member
    - 9am, Monday 31 August, research area confirmed
    - 5pm, Friday 23 October, report submitted

# Assignment 1 handout

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## COMPSCI 289

### Assignment 1: Individual Seminar

Worth 30% of your final grade

This assignment is due by 5:00pm on Sunday 23 August 2020

This is an individual assignment

#### Aims

The aim of this assignment is to give you experience in reading, understanding, communicating and questioning Computer Science research in a specific area.

#### Objectives

- Study a Computer Science topic in depth
- Identify strengths and weaknesses of advances in a particular area of Computer Science
- Give an oral presentation on a technical subject
- Write a summary of a technical subject
- Participate in discussions of Computer Science topics

#### Background

This is an opportunity to gain a deep understanding of what research is being undertaken in an area of Computer Science which interests you. You will read and present on an important and topical research paper from a set which has been identified from the major research areas undertaken in the school. While you will present the research from a single paper you will likely find it useful to read a few other papers in the area to gain a fuller understanding of the research context within which your paper is situated. You will also have support from the lecturers and tutors to understand advanced techniques and research concepts that may be presented in the paper.

Once you have read and understood the research paper you will prepare a presentation for the class, to inform them of the research which is present in the paper. Along with the presentation you will prepare a 1-page handout which summarises the research presented in the paper. In each presentation session there is a question and answer session where the class will ask questions about the research and its implications. You will also be expected to ask questions about papers which are presented to you by your classmates.

#### Deadlines

Date	Deadline
5:00pm, Tuesday 28 July 2020	Choice of research papers
9:00am, Thursday 30 July 2020	Research paper selection notified
5:00pm, Sunday 23 August 2020	Presentation and handout submitted

#### General information for seminar presentations

- Presentation time: 15 minutes
- Question & answer: 10 minutes
- Number of slides: 20 (maximum) – an exception would be when there are many photographs and other easily explained material. Slides containing the reference list are in addition to this number
- Number of rehearsals recommended: 2 (at least) – this is important for clarity and for timing
- Available presentation slots:

# Assignment 1 tutors

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- Four tutors available to support CS areas:
  - Yan Kolezhitskiy
    - theory and cybersecurity
  - Xinglong (Luke) Chang
    - cybersecurity and graphics and vision
  - Roger Su
    - theory
  - Shalini Banerjee
    - cybersecurity
- Lecturers will support other areas

# Administration

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Class rep

Discrimination

Covid-19

Plagiarism

# We're looking for Class Reps

## Nominate yourself today and get:

An important and recognised addition to your resume // Improve your leadership skill set // Ability to make significant changes to your education // End of Year Function // Chance to win UBS Vouchers.

## Responsibilities:

Elicit feedback from your classmates // Attend department and faculty meetings // Help resolve issues that may arise in your class.

For more info visit [www.ausa.org.nz/representation](http://www.ausa.org.nz/representation)  
email [classreps@ausa.org.nz](mailto:classreps@ausa.org.nz) or speak to your lecturer



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INDEPENDENT • CONFIDENTIAL



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university procedures,  
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## Our University

- ✓ safe
- ✓ inclusive
- ✓ equitable

**racism**  
**sexism**  
**ableism**  
**ageism**  
**homophobia**  
**transphobia**

# **ZERO tolerance for discrimination**

He wāhi whakatoihara kore



[www.equity.auckland.ac.nz/zerotolerance](http://www.equity.auckland.ac.nz/zerotolerance)

## Rights

- Freedom of expression
- Academic freedom

## Responsibilities

- Compliance with the law and University requirements

**ZERO tolerance  
for discrimination**

He wāhi whakatoihara kore

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# For advice and support

Equity Office – Te Ara Tautika  
[equity@auckland.ac.nz](mailto:equity@auckland.ac.nz)

Proctor  
[proctor@auckland.ac.nz](mailto:proctor@auckland.ac.nz)

AUSA Student Advice Hub  
[epsomhub@ausa.org.nz](mailto:epsomhub@ausa.org.nz) or  
[cityhub@ausa.org.nz](mailto:cityhub@ausa.org.nz)

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# Coronavirus (COVID-19)

## Briefing slides

February 2020



THE UNIVERSITY OF  
**AUCKLAND**  
To Whara Wāsego o Tūwhiri Pūkakiaru  
NEW ZEALAND

What can I  
do to stay  
safe?

If you're feeling unwell  
**call your doctor** or  
a health professional.

Try to **isolate yourself** from  
others in the meantime.

Call HEALTHLINE on  
**0800 358 5453**  
for advice.

Just like in flu season, remember to  
**maintain healthy hygiene practices:**

1. Frequent hand washing with soap
2. Covering sneezes and coughs with a tissue
3. Stay away from others if you're sick
4. Avoid contact with people who have cold and flu-like symptoms

(ref. [https://www.health.govt.nz/system/files/documents/pages/protect\\_yourself\\_against\\_coronavirus\\_poster\\_v5.pdf](https://www.health.govt.nz/system/files/documents/pages/protect_yourself_against_coronavirus_poster_v5.pdf))

## How can we look after each other?

### **Act with manaakitanga**

Show respect, care and support for others. Act with kindness and hospitality.

### **Foster whanaungatanga**

Commit to making our University community a place in which all feel they belong.

### **Be respectful**

Remember that if someone wants to wear a face mask, it does not mean they are unwell. They have every right to wear one and do what makes them feel comfortable.



### **Be kind**

As we all work together to minimise the spread of the virus, remember to be kind and supportive to each other.

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## What if I witness bad behaviour?

**Any forms of bullying, harassment, discrimination or xenophobic behaviour are completely against the University's principles of equity, care, compassion and hospitality to all, and have no place on our campuses.**

### **If you do witness such behaviour:**

- Stay calm and act. Don't stay silent.
- Call out the behaviour and tell the person to stop. Remind them that such behaviour is not appropriate.
- Correct any misinformation or inaccuracies in what people are saying.
- Show support, and if appropriate, refer the person subjected to the bad behaviour to the Student Health & Counselling Service.



# Academic Integrity

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- The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms
- [Academic Integrity Course](#)

# Summary

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- Research Seminar in Computer Science
  - Introductions
  - Structure of the course
- Assignment 1 handout
  - Choose research papers by 5pm Tuesday 28 July