Australian National University

Structured Programming
COMP1110/COMP6710

Your lecturer
Mechanics/admin
Course goals
Material
Resources
Assessment

Introduction

- Who I am and why are we here?

    - Josh Milthorpe, Lecturer, Research School of Computer Science
    - Diversity & Inclusion Coordinator for RSCS
    - Research interests
        - High performance computing
        - Numerical computing
        - Parallel programming models
        - Resilience

Mechanics

- Web page
  - Schedule, labs, assignment, notices
- Streams
  - Enrolment
- Piazza
- Consultation hours
- Labs
  - You must enroll in a lab group by the end of week 1
- 1 COMP1140 lecture

First Year Computer Science
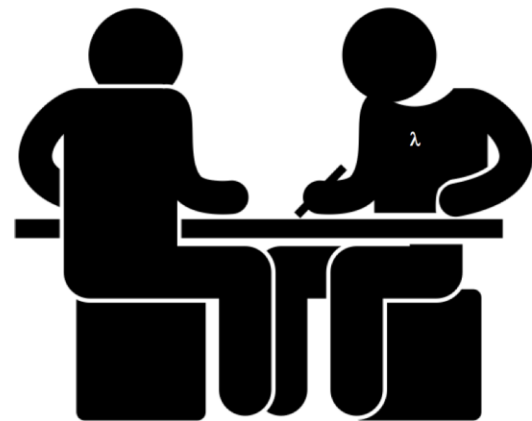
Consultations

1:1 consultations are available for students enrolled in the following courses: COMP1100, COMP1110, COMP1140, COMP1600, COMP1730, COMP6710, COMP6730 Students are asked to provide their UID to the tutor and to respect a 5min limit during busy times.

Here
Tue 12-1pm, Tue 5-6pm, Wed 5-6pm, Thu 5-6pm, Fri 12-1pm

CECS Course Representatives

Why become a course representative?

- **Develop skills sought by employers**, including interpersonal, dispute resolution, leadership and communication skills.
- **Become empowered**. Play an active role in determining the direction of your education.
- **Become more aware of issues influencing your University** and current issues in higher education.
- **Ensure students have a voice** to their course convener, lecturer, tutors, and college.

Roles and responsibilities:

- Act as the official liaison between your peers and convener.
- Be creative, available and proactive in gathering feedback from your classmates.
- Attend regular meetings, and provide reports on course feedback to your course convener and the Associate Director (Education).
- Close the feedback loop by reporting back to the class the outcomes of your meetings.

CECS Course Representatives

**Want to be a course representative? Nominate today!**

Please contact your convenor by 4th March to nominate yourself as a course representative.

ANUSA and PARSA offer course representative training on 12th March to give you skills to be an effective course representative.

Contact ANUSA President, Eleanor Kay, for more information:
sa.president@anu.edu.au

ANUSA CECS Representatives

- Computer Science Rep: **Tyrus Caldeira**
- Engineering Rep: **Matilda Dowse**
- We're advocates for CECS and do our best to ensure all CECS students wellbeing
- We can help you with anything about CECS, ANUSA or ANU.
- If you have academic, personal, course issues etc, we are here to help!
- Contact us at: **sa.cecs@anu.edu.au**

anusa.com.au
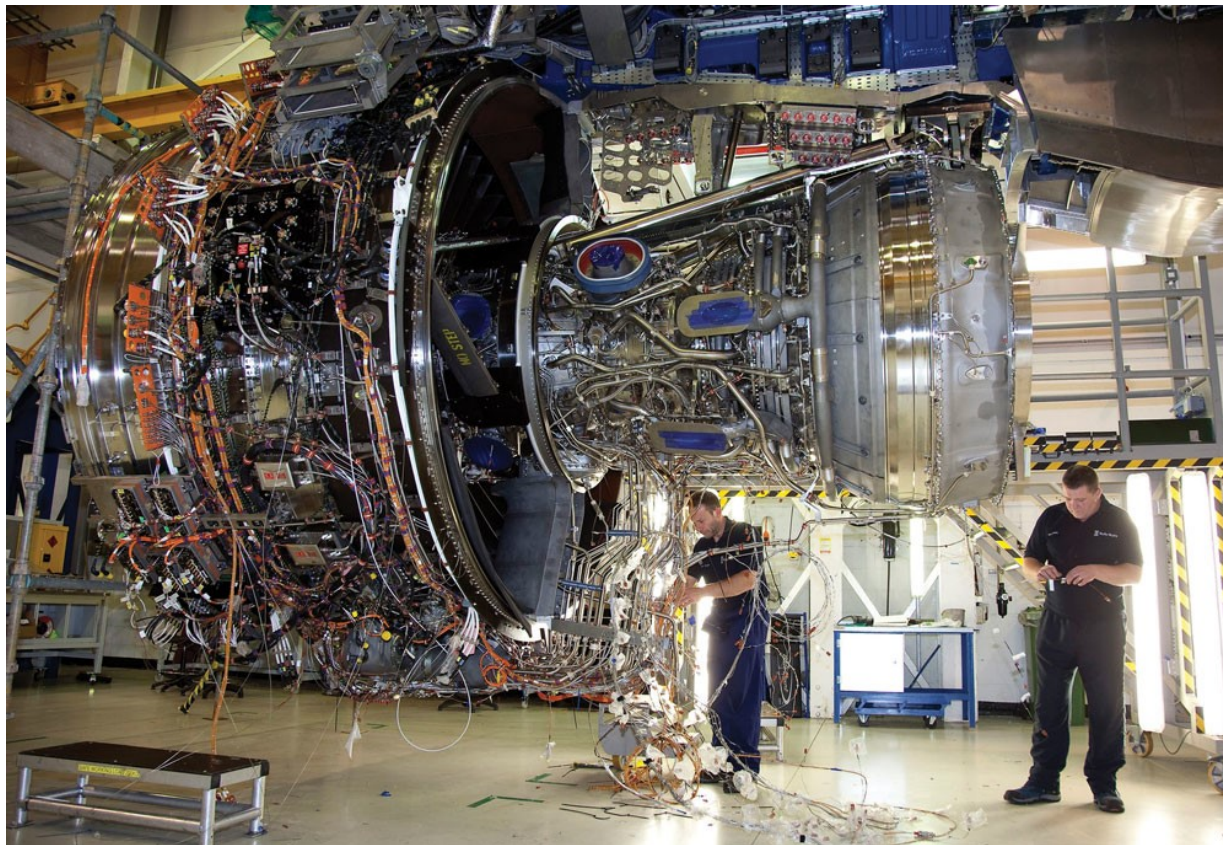
Rolls Royce Trent XWB for the A350.

Photo: AINonline

"Essentially, engineering is all about cooperation, collaboration, and empathy for both your colleagues and your customers. If someone told you that engineering was a field where you could get away with not dealing with people or feelings, then I'm very sorry to tell you that you have been lied to. Solitary work is something that only happens at the most junior levels...."

Yonatan Zunger

Course goals

Introduction to…

- Core Computer Science ●
  - Object oriented programming
  - Data structures, algorithms
- Software Engineering ●
  - Working with large scale software systems
  - Testing
- Software Development Skills ●
  - Modern OO language (Java, including Java FX)
  - IDE (IntelliJ) and SCM (Git)

Material

The material in these lectures is drawn from a number of sources, including:

- The Oracle Java Tutorial (for intro to Java)

- The Oracle JavaFX Tutorial

- Previous years' notes

Teaching modality

Lecture material made available to you *ahead of time* via the course web site.

Classes are used to work through material with working examples.

Classes work best when you engage.

"I've failed over and over and over again in my life.

Michael Jordan

Resources

- These slides
  - Available on course website at the start of each week

Resources cont.

- These slides
  - Available on course website at the start of each week
- Online
  - Class web site
  - Class forum (Piazza)
  - Oracle Java SE Tutorial (html, pdf)
  - Oracle JavaFX Tutorials
  - U. Waterloo Java Visualizer (see course web page for link)
  - StackOverflow and other online forums
  - IntelliJ online tutorials

Assessment

10% Lab tests

5% Individual assignment

5% Class engagement

25% Group assignment

5% Mid-semester exam

50% Exam

Hurdle Assessments

You must **pass the basic competency assessment**, week 4.

You must complete the teaching improvement task, week 1.

You must receive a mark of at least **40% in the final exam.**

Failure of any of these hurdles will result in automatic failure of the course

Please review the administrative overview (course web page)

Plagiarism

Honesty and integrity are paramount.

They are *not* at odds with research and collaboration.

Do be resourceful, collaborate and engage.

Never represent someone else's work as your own.

Do read the ANU's position on academic integrity
http://academichonesty.anu.edu.au/

"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird... So let's look at the bird and see what it's doing -- that's what counts. I learned very early the difference between knowing the name of something and knowing something."

Richard Feynman