CM1301: Principles, Tools, and Techniques for Secure Software Engineering

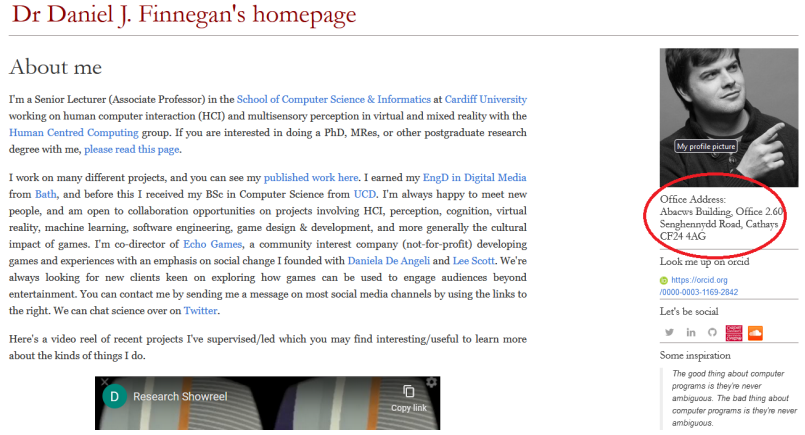
Dr Daniel J. Finnegan

2023/2024

Introduction

Greetings

- EngD in virtual reality
- Office hours: See LC
- For details, best visit my site: ps2fino.github.io
- When contacting me via email, you **SHOULD** prepend the email subject line with "CM1301 Student Query:" otherwise the likelihood of receiving a prompt response from me is in the single digits
- Office Address: Abacws Building, Room 2.60
- If you're ill/suspect you're ill, please do not come to my office; meet online instead. I typically take no more than 3 students in my office at a time; you may have to wait.



Team

Dr Nervo Verdezoto Dias

Ms Sunbul Ahmed

Dr Carolina Fuentes Toro

Dr Yulia Cherdentseva

- Autumn W6 to Autumn W 12 -> Dr Verdezoto
- Autumn W12 to Spring W4 -> Me
- Spring W4 -> Spring W10 -< Drs Fuentes Toro & Cherdentseva

Topics we'll cover

- Requirements Engineering
  - User Stories/Scenarios
  - Interviews
  - Feature descriptions
- Object Oriented Programming
  - Relationships
  - UML diagrams
  - Modularity
- Software Development
  - Scrum, Kanban
  - Reporting (!)
  - Version Control
- Security

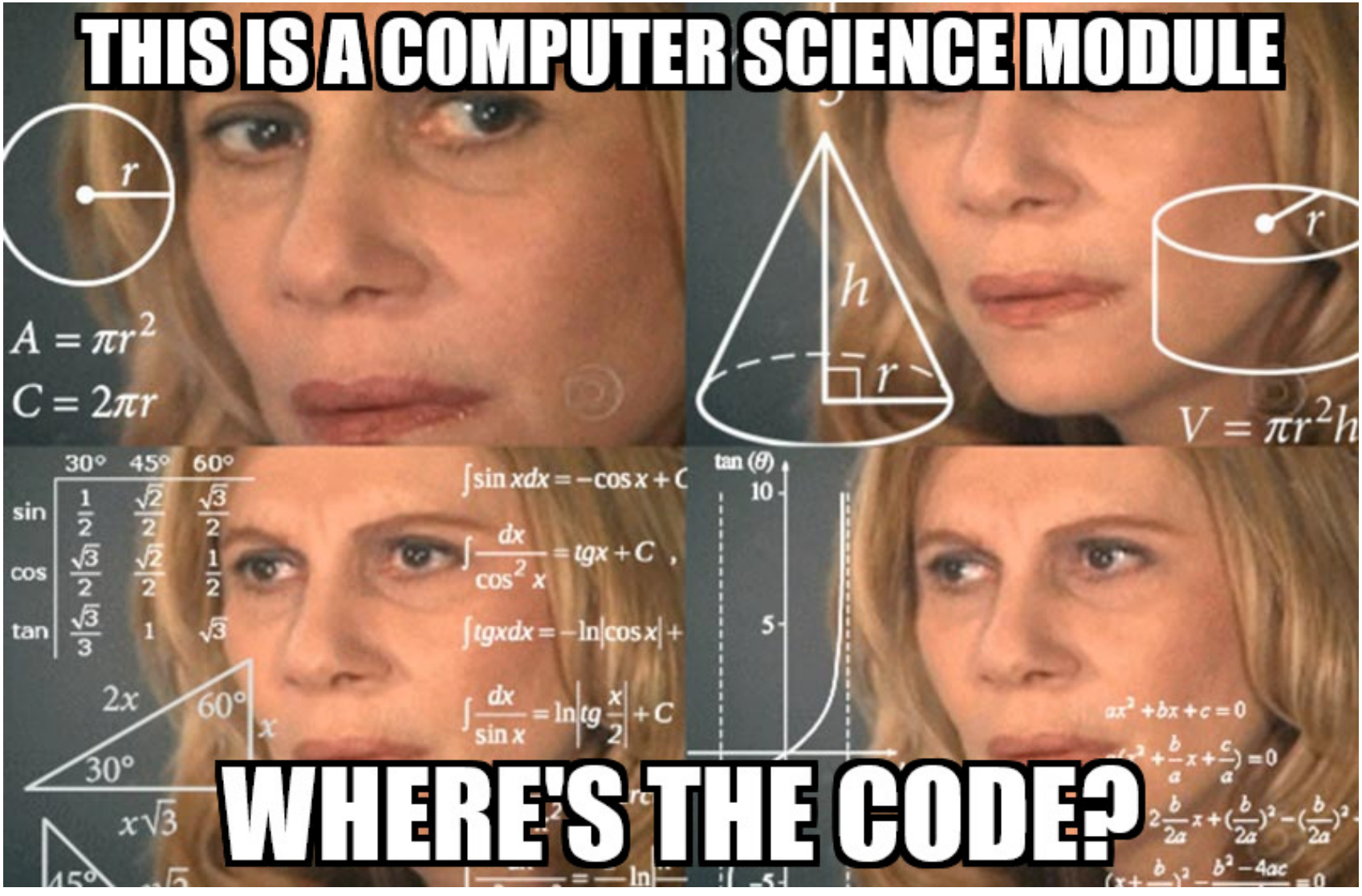
Language agnostic $\rightarrow$ C/C++, R, Python, Java, Javascript etc. . .

What this module is *not* about

- This is not a python programming module
- This is not about writing hundreds of lines of code
- This is not about python

In Short

Coursework


THIS IS A COMPUTER SCIENCE MODULE
r
$A = \pi r^2$
$C = 2\pi r$
h
r
r
$V = \pi r^2 h$
30° 45° 60°
sin $\frac{1}{2}$ $\frac{\sqrt{2}}{2}$ $\frac{\sqrt{3}}{2}$
cos $\frac{\sqrt{3}}{2}$ $\frac{\sqrt{2}}{2}$ $\frac{1}{2}$
tan $\frac{\sqrt{3}}{3}$ 1 $\sqrt{3}$
$\int \sin x dx = -\cos x + C$
$\int \frac{dx}{\cos^2 x} = tgx + C$,
$\int tgx dx = -\ln|\cos x| +$
$\int \frac{dx}{\sin x} = \ln\left|tg\frac{x}{2}\right| + C$
2x
60°
x
30°
$x\sqrt{3}$
tan (θ)
10
5
$ax^2 + bx + c = 0$
WHERE'S THE CODE?

Coursework (cont)

- 3 tests throughout the year
  - These may be in your timetable already; if not, don't worry: announcements will be made via LC
- Administered via Learning Central but **MUST** be taken on the day of release.
- 10 questions per test on topics covered up to the day the test is taken.
- Designed to make you reflect upon and apply learning in labs/class.
- Proforma with details available via LC

References I