introduction

info-20002: foundations of informatics

### When and Where?

- Lectures (2 x 1hr/week):
  - Monday (12pm), PAR-MSD-B120 (Singapore Theatre)
  - Thursday (1pm), PAR-Old Engineering-107 (A1 Theatre)
- Workshop (1 x 2hr/week): Tutorial and Practical Lab, Alice Hoy Labs
- Google Calendar: **Foundations of Informatics**

# Help!

- 1. Post questions to the LMS Discussion Forum
- 2. Talk to your tutor during workshop time
- 3. Talk to the lecturers after lecture time (outside lecture theatre)
- 4. Consulation time: by appointment
- 5. Read your University emails

### **Tools and Trades**

#### • http://www.lms.unimelb.edu.au

- Subject outline: schedule and links to all materials
- Lecture slides and readings (slides may be updated before the lecture)
- Workshop sheets and project specification
- Lab exercises in Python
  - Python's Anaconda distribution
  - http://ivle.informatics.unimelb.edu.au
  - Your own Python (desktop/cloud) installation

#### • <a href="http://drive.google.com">http://drive.google.com</a>

- Google Spreadsheet and Visualisation
- No textbook
  - But plenty resources (mostly free and open source)
  - See indvidual lecture page

#### Assessment

- Continuous/Project (40%, three stages)
  - Phase 1 (10 %, individual):Data Representation, using Python
  - Phase 2 (10 %, individual & group):
     Data Processing, using Google Spreadsheet
  - Phase 3 (20 %, group):Data Analysis and Visualisation, Web Application
- Exam (60%)
  - Closed book, Conceptual, Algorithmic Thinking,
     Coding

## Phase 3 Web Application

- Pick your most loved dataset. Some of the last year favourites:
  - ASX historical dataset
  - Titanic passenger list
  - Disasters in Australia
  - Traffic accidents in Victoria
- Develop an interactive web application (data exploration).
- Use your application and skills to find some interesting insights/patterns.
- Some small activities will be carried out during workshop to guide you through the process.
- Examples of student work:
  - ASX Pivotal Stocks

# Hurdle Requirement

- In order to pass this subject you need to both:
  - pass the continuous assessment (project)
  - pass the final exam.
- If you fail either component, you will fail the overall subject.

### Plagiarism

Plagiarism is the act of representing as one's own original work the creative works of another, without appropriate acknowledgment of the author or source. (Creative works may include published and unpublished written documents, interpretations, **computer software**, designs, music, sounds, images, photographs, and ideas or ideological frameworks gained through working with another person or in a group. These works may be in print and/or electronic media.)

### To Do List

- Install Anaconda in your computer/laptop.
- <a href="http://ivle.informatics.unimelb.edu.au">http://ivle.informatics.unimelb.edu.au</a>
  Login, accept terms & condition (if applicable), report any problem immediately
- <a href="http://drive.google.com">http://drive.google.com</a>
  Use your Google account, familiar yourself with Google spreadsheet environment
- Review subject outline
- Readings for lectures

### Who?

- David Marques (Lecturer)
- Anthony Stell (Lecturer) (anthony.stell[at]unimelb.edu.au)
- Kevin Then (Tutor)
- Ivo Widjaja (Lecturer) (ivow[at]unimelb.edu.au)
- Lu Yang (Tutor)
- Luke Zappia (Tutor)