STATS 782: Introduction

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Course Aims

- Introduction to computing environment and software tools useful for a research or applied statistician

- Students will be able to
  - analyse data
  - write reports
  - give presentations
  - produce new software components for your own use and for use by others

Course Topics

- Computers and software environments

- The Linux and Unix operating systems

- Software tools including the Emacs text editor

- Typesetting with LaTeX, including Beamer

- The **S** language and **R**

- Sweave

- MySQL

- Maple

Assessment

- No exam

- Five assignments

- A test

- Two one-on-one demonstrations of your knowledge

Meeting Times

- Lectures, 9:30 to 11:00, Monday, 1:00 to 2:30, Wednesday

- I will be available in the Statistics Grad room at a time to be arranged

- I will be in the City all day on Monday and Wednesday

Resources

- Home page accessible from my home page:
  `http://www.stat.auckland.ac.nz/~dscott/782/`

- Books given on course information sheet

- Handouts, tutorials, guides and manuals

- Brief lecture notes

My Background

- 1966: studied PL/1 (unsuccessful)

- 1981-1982: Postgraduate Diploma of Computer Science
  - Motorola M680 assembler, Vax assembler, Pascal, Cobol, Apple Basic
  - Vax VMS operating system

- 1984: Siromath Statistical Consultants
  - Unix on Vax,
  - Minitab
  - Z80 assembler

- 1984: Data General, CDC, Fortran

- 1987: TeX, Apple Macintosh, IBM PC

- 1989: Word, Excel, Powerpoint, S-PLUS, DEC Workstation

My Background

- 1994: Sun Workstation, R, SAS, BUGS

- 1998: C, HTML

- 2000: Matlab

- 2003: R package *HyperbolicDist*

- 2007: MySQL and RODBC