

# Opportunities at Monash University

**Econometrics and Business Statistics** 

Young Statisticians Conference 2017

# Post-graduate study - PhD

PhD scholarships, possibility of funding or top up through CSIRO.

- About 10 students accepted each year to the department
- Two required classes in first year: Statistics Theory, Econometrics Theory
- Information available at here
- Topics: Visualisation, forecasting, statistical learning, bioinformatics





# Post-graduate study - Honours

Honours research, and several scholarships available

- Information: Video, program
- Topics: hierarchical temporal modeling, high-dimensional data vis for physics, functional clustering of tennis serves, pedestrian traffic predictions in Melbourne from sensor data, Victorian bush fire risk, restaurant booking patterns, interactive web apps for time series, perception of temporal patterns



# **Business Analytics Major**

# Building quantitative citizenship

- Data Modelling and Computing: taking messy data to tidy data, visualisation, optimisation and modelling; project is to find and clean a data to solve a problem
- Statistical Thinking using Randomisation and Simulation: Understanding randomness, using permutation, bootstrap, and simulation. Significance testing, optimal game strategies, statistical distributions, modeling using generalised linear models, multilevel models, mixed effects, trees, bagging and boosting; kaggle challenge to build best model, and explain findings

 Business Analytics: statistical learning models and machine learning; kaggle challenge to build a classifier

Electives: visualisation, databases, advanced statistical models, advanced machine learning, high-dimensional data analysis

All open source software and open data based. Focus to teach students how to do things, with active learning, not just to know things.

### **Jobs**

- Rob Hyndman currently has a research assistant position available, and also will have several post-doc positions available soon. Keep an eye on his blog
- Department is growing. Currently hiring junior position, and new junior positions will be advertised soon. Particularly we are looking to build the Business Analytics group.

## useR! 2018 is in Brisbane

useR! 2018 is coming to Australia, July 10-13 2018. See the web site https://user2018.r-project.org for details, and announcements about travel scholarships.



Tutorials on R, hear about latest developments, career opportunities.