Conference note template

Jung Xue

2020-11-24

Contents

Conference information	5			
Chris Wild Education, democratizing data, and software: Targeting the intersection	9			
0.1 Subsection	9			
Felipa Zabala A framework to evaluate imputation strategies at Stats NZ	L 1			
0.2 Subsection	11			
Susmita Das A machine learning model to identify private dwellings from admin data 1	13			
0.3 Subsection	13			
Simon Urbanek Interactive Visualisation using RCloud 1	15			
0.4 Subsection	15			
Jason Wen Accessing evidence of firing pin impression by using machine learning 17				
0.5 Subsection	17			
Richard Penny Modelling for COVID in Official Economic Time Series 1	L 9			
0.6 Subsection	19			
Maree Luckman A lifetime of data - Biometrics Technician to Senior Applied Statistician 2	21			
0.7 Subsection	21			

into the 'real world' and back to academia	23
0.8 Subsection	23
Agnes Yongshi Deng Designed experiments for tuning hyperparameters in machine learning algorithms	25
0.9 Subsection	25
Alistair Ramsden Testing the confidentiality of synthetic data for the Stats NZ Integrated Data Infrastructure (IDI) Population Explorer dataset	
0.10 Subsection	27
Rory Ellis Using Bayesian Growth Models to Predict Grape Yield	2 9
0.11 Subsection	29
Martin Hazelton The Future of Statistics at New Zealand Universities	31
0.12 Subsection	31
Wilma Molano HLFS mode of collection: A journey due to COVID-19	33
0.13 Subsection	33
Shanika Wickramasuriya Non-negative forecast reconciliation for forecasting hierarchical time series	35
0.14 Subsection	35
0.15 Further reading	35
Claudia Rivera-Rodriguez Optimal sampling allocation for outcome dependent designs in cluster-correlated data settings	37
0.16 Subsection	37
Martin Upsdell Estimating the time lag between predator abundance and prey abundance	39
0.17 Subsection	39

CONTENTS 5)

Richard Arnold Statistics of Ambiguous Rotations	41
0.18 Subsection	41
Len Cook Missing in action - a statistical window on prisons	43
0.19 Subsection	43
Peter Mullins War Stories	45
0.20 Subsection	45
Thomas Lumley Influence functions, and why you should care	47
0.21 Subsection	47
Beatrix Jones Dimension reduction for imbedding high dimensional measurements into Bayesian Networks	49
0.22 Subsection	49
Alasdair Noble A Bayesian approach to modelling of Phosphorus inputs to rivers from diffuse and point sources	51
0.23 Subsection	51
Andrew Sporle Beyond the Integrated Data Infrastructure - building a strategic data resource for Aotearoa	53
0.24 Subsection	53
Azam Asanjarani Decision Making for Partially Observable Markov Processes	55
0.25 Subsection	55
Concluding Remarks	57
How to use RBookDown	59

Conference information

XXXX Conference:

• **Time:** 8:55 Tuesday 24/11/2020 Wednesday 25/11/2020

• **Venue:** MLT2/303-102 Map

Registartion: YesHosted by: NZSA

Organiser: Organiser EmailConference Schedule Link Here

Keynote Speakers:

Speaker	Topic	Email	Website
Chris Wild	Education		
	democratizing		
	data and		
	software		
	Targeting the		
	intersection		
Felipa Zabala	A framework to		
_	evaluate		
	imputation		
	strategies at		
	Stats NZ		
Susmita Das	A machine		
	learning model		
	to identify		
	private dwellings		
	from admin data		
Simon Urbanek	Interactive		
	Visualisation		
	using RCloud		
	-		

Speaker	Topic	Email	Website
Jason Wen Richard Penny	Accessing evidence of firing pin impression by using machine learning Modelling for COVID in Official Economic Time Series	jwen246@ aucklanduni.ac. nz	
Maree Luckman	A lifetime of data - Biometrics Technician to Senior Applied Statistician		
Andrew Balemi	There and back again: A statisticians journey into the 'real world' and back to academia		
Agnes Yongshi Deng	Designed experiments for tuning hyperparameters in machine learning algorithms	yongshi.deng@ auckland.ac.nz	
Alistair Ramsden	Testing the confidentiality of synthetic data for the Stats NZ Integrated Data Infrastructure (IDI) Population		
Rory Ellis	Explorer dataset Using Bayesian Growth Models to Predict Grape Yield		

Speaker	Topic	.Email	Website
Martin Hazelton	The Future of Statistics at New Zealand Universities		
Wilma Molano	HLFS mode of collection: A journey due to COVID-19		
Shanika Wickramasuriya	Non-negative forecast reconciliation for forecasting hierarchical time series	s. wickramasuriya@ auckland.ac.nz	
Claudia Rivera- Rodriguez	Optimal sampling allocation for outcome dependent designs in cluster-correlated		
Martin Upsdell	data settings Estimating the time lag between predator abundance and prey abundance		
Richard Arnold	Statistics of Ambiguous Rotations		
Len Cook	Missing in action - a statistical window on prisons		
Peter Mullins	War Stories	len_cook@xtra. co.nz	https: //www.wgtn.ac. nz/igps/about- us/staff/senior- associates/mr- len-cook

Speaker	TopicEmail	Website
Thomas Lumley	Influence	
	functions, and	
	why you should	
	care	
Beatrix Jones	Dimension	
	reduction for	
	imbedding high	
	dimensional	
	measurements	
	into Bayesian	
	Networks	
Alasdair Noble	A Bayesian	
	approach to	
	modelling of	
	Phosphorus	
	inputs to rivers	
	from diffuse and	
	point sources	
Andrew Sporle	Beyond the	
	Integrated Data	
	Infrastructure -	
	building a	
	strategic data	
	resource for	
	Aotearoa	
Azam Asanjarani	Decision Making	
	for Partially	
	Observable	
	Markov	
	Processes	

interesting I have meet/noticed

People	Field/Job	Contact	Facts
Joe Smith	Consultant @ UoA	xx@gmail.com	His from New Caledonia

Note: All information disclosed within this conference e-note are intented for personal use.

Chris Wild | Education, democratizing data, and software: Targeting the intersection

0.1 Subsection

Felipa Zabala | A framework to evaluate imputation strategies at Stats NZ

0.2 Subsection

Susmita Das | A machine learning model to identify private dwellings from admin data

0.3 Subsection

Simon Urbanek | Interactive Visualisation using RCloud

0.4 Subsection

Jason Wen | Accessing evidence of firing pin impression by using machine learning

0.5 Subsection

Richard Penny | Modelling for COVID in Official Economic Time Series

0.6 Subsection

Maree Luckman | A lifetime of data - Biometrics Technician to Senior Applied Statistician

0.7 Subsection

Andrew Balemi | There and back again: A statisticians journey into the 'real world' and back to academia

0.8 Subsection

Agnes Yongshi Deng |
Designed experiments for
tuning hyperparameters in
machine learning algorithms

0.9 Subsection

Alistair Ramsden | Testing the confidentiality of synthetic data for the Stats NZ Integrated Data Infrastructure (IDI) Population Explorer dataset

0.10 Subsection

Rory Ellis | Using Bayesian Growth Models to Predict Grape Yield

0.11 Subsection

Martin Hazelton | The Future of Statistics at New Zealand Universities

0.12 Subsection

Wilma Molano | HLFS mode of collection: A journey due to COVID-19

0.13 Subsection

Shanika Wickramasuriya | Non-negative forecast reconciliation for forecasting hierarchical time series

- 0.14 Subsection
- 0.15 Further reading

https://robjhyndman.com/publications/nnmint/

Claudia Rivera-Rodriguez | Optimal sampling allocation for outcome dependent designs in cluster-correlated data settings

0.16 Subsection

Martin Upsdell | Estimating the time lag between predator abundance and prey abundance

0.17 Subsection

Richard Arnold | Statistics of Ambiguous Rotations

0.18 Subsection

Len Cook | Missing in action - a statistical window on prisons

0.19 Subsection

Peter Mullins | War Stories

0.20 Subsection

Thomas Lumley | Influence functions, and why you should care

0.21 Subsection

Beatrix Jones | Dimension reduction for imbedding high dimensional measurements into Bayesian Networks

0.22 Subsection

Alasdair Noble A Bayesian approach to modelling of Phosphorus inputs to rivers from diffuse and point sources

0.23 Subsection

Andrew Sporle | Beyond the Integrated Data Infrastructure - building a strategic data resource for Aotearoa

0.24 Subsection

Azam Asanjarani | Decision Making for Partially Observable Markov Processes

0.25 Subsection

Concluding Remarks

What did you learnt by the end of this session/course?

Take home message?

Add 3 questions to ponder.

How to use RBookDown

Firstly, you must read the RBookDown Bible by YiHui Xie

In essence, you write in a mixture of markdown (For basics), html (to extend on markdown) and latex language (mostly for equations) to create a simple Note.

You can customise your style and theme through your own CSS.

RMarkdown are mostly preferably used to knit e-books(HTML), use TexStudio if you want a proper printable PDF, Latex will be easier.

Here are some useful tips to get started

- 1: To add a chapter, just open a R file and save as .RMD. Use number 0 to 99 with a hyphen to order the RMD files and maybe add a Chapter name so it is easier to select from Files window at bottom right of the R Studio.
- 2: Code chunks can generate graphical outputs, To insert pictures just use include_graphics instead of \includegraphics{} or . Width can be customised.

knitr::include_graphics(rep('images/knit-logo.png', 3))

- 3: Use 1 grave accent ' to include the inline code, use 3 grave accent to include a chunk of code.
- 4: use {-} to stop automatic chapter names
- 5: Often you have tables, you can copy the table to a excel file and convert table to markdown tables, using Online Websites