



IASE 2019

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**DECISION MAKING  
BASED ON DATA**

**Location: Sasana Kijang (Bank Negara Malaysia)**

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AUGUST • 13-16 • 2019,  
KUALA LUMPUR, MALAYSIA



## **August 13 - WORKSHOPS**

**9 am - 12 pm : Workshop A (Training Room 3.1)**

**What should a good statistical poster look like ?**  
**Reija Helenius & James Nicholson**

**9 am - 12 pm: Workshop B (Computer Training Room)**

**The Usage of R in Understanding Statistical Subjects**  
**Mohd Bakri Adam**

**1 pm - 4 pm: Workshop C (Training Room 3.2)**

**The Role of Simulation in Building Conceptual  
Understanding of Statistical Inference**  
**Gail Burrill**



## WEDNESDAY AUGUST 14

8.30 am - 8.45 am

OPENING BY MASTER OF CEREMONY  
AND WELCOME BY GAIL BURRILL  
Conference Hall 1

8:45 am - 9:45 am

**KEYNOTE Azami Zaharim**  
Malaysia: Wind Energy Distribution Recent Development  
Conference Hall 1

PARALLEL SESSIONS

**TRAINING ROOM 3.1**  
(Chair Engel)

**TRAINING ROOM 3.2**  
(Chair Martignon)

9:45 am - 10:15 am

**M. Borovcnik** Informal Inference  
Approaches towards Statistical  
Inference

**K. Vehkalahti** Engaging Everyone with  
Open Data Science

10:15 am - 10:30 am

SHORT BREAK

10:30 am - 11:00 am

**G. Burrill** Understanding Sampling  
Distributions: The Role of Dynamic  
Interactive Technology

**R. Oktavia, N. Nurmaulidar, I. Syahrini,  
H. Hafnani** Effects of teaching the  
sampling distribution of the means using  
simulation with and without stating the  
central limit theorem

11:00 am - 11:30 am

**S. Budgett, M. Puloka** Making sense of  
categorical data - question confusion

**C. Dehon, Ph. Emplit, E. Van Lierde** A  
case study of learning analytics within a  
statistics course for undergraduate  
students in economics

11:30 am - 12:00 pm

**J. Ridgway, J. Nicholson** GAISE-ing  
beyond...

**N. Halid, Z. Mahmud, B. Osman, S.  
Sapri** Exploring teachers' attitude and  
statistical knowledge in teaching  
statistics based on Rasch measurement  
model

12:00 pm - 1:00 pm

LUNCH

1:00 pm - 1:30 pm

**S. Ocampo, B. Ocampo** Capacity  
Building through Project Based  
Learning in Bayesian Statistics

**F. Chiesi** How deep is your approach to  
learning? A study with undergraduate  
psychology students

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|-------------------|--|---|
| 1:30 pm - 2:00 pm | <b>A. Renelle, S. Budgett, R. Jones</b><br>Recognition of random processes from simulated auditory experiences   | <b>C. Østergaard</b> Questioning the world – statistical inquiry  |
| 2:00 pm - 2:30 pm | <b>A. D’Amelio, E. Mamaní, J.Tari</b> An evaluation model to reduce stress in university students  | <b>V. Yap, W. Liu</b> On Inferential Techniques used in Studies on Teaching Statistics  |
| 2:30 pm - 3:00 pm | <b>A.Bilgin, P. Petocz</b> Dealing with the increased assessment workload of incorporating work-integrated learning in a capstone unit for an undergraduate major in statistic | <b>A. Serradó-Bayés</b> Obstacles in the evolution of secondary school students’ mental models of reasoning on decision-making                    |
| 3:00 pm - 3:30 pm | <b>BREAK</b>   |   |
|                   | <b>(Chair Bilgin)</b>  | <b>(Chair Nicholson)</b>  |
| 3:30 pm - 4:00 pm | <b>E. Bologna, M.Vaiman, M. Alfonso</b><br>Aligning evaluation with achievement objectives: automated exams based on Bloom's taxonomy  | <b>G. Ekol</b> Perspectives on foundation statistics: Some examples from prospective secondary mathematics teachers                               |
| 4:00 pm - 4:30 pm | <b>J. Dawson, A. M J O'Shea, J. Ghosh</b><br>Reducing high-frequency time series data in driving studies   | <b>F. Berens</b> Statistics beliefs of advanced social science students - a qualitative evaluation of focus groups                                |
| 4:30 pm - 5:00 pm | <b>S. Elbehary</b> The Necessity of Revising Primary School Content of Probability in Egypt to Enhance Students' Probabilistic Reasoning                                       | <b>E. Umeh, J.Obulezi</b> Data-Driven Decision Management (DDDM) and Educational Data Analytics (EDA) in Nigerian school system                   |
| 5:00 pm - 5:30 pm | <b>T. Terán, J. Ciminari</b> Let’s Learn Statistics Playing  | <b>Alzahrani, E. Stojanovski</b> A Gender-Based Analysis of the Effect of Mathematics Anxiety on Mathematics Performance among Secondary Students |
| 5:30 pm - 6:00 pm | <b>SAS PRESENTATION - ISLP PRESENTATION<br/>CONFERENCE HALL 1</b>  |   |

## THURSDAY AUGUST 15

|                     |   |  |
|---------------------|---|--|
| 8:20 am - 8:30 am   | <b>HOUSEKEEPING<br/>(Chair Budgett)</b>   | <b>HOUSEKEEPING<br/>(Chair Burrill)</b>  |
| 8:30 am - 9:00 am   | <b>D. Canada</b> Middle School Students’ Informal Inferences About Falling Raindrops  | <b>M. Handa</b> Study of Assessment when students learn through the teaching materials with statistics decision                                      |
| 9:00 am - 9:30 am   | <b>T. Apata, Y. N’Guessan, K. Ayantoye, S. Ogunjimi</b> Agricultural Land-Use Systems and Climate Change among small farmers in Nigeria                       | <b>T. Kyng, L. Li, A. Bilgin</b> Risk, Uncertainty & Decisions about Australian Retirement Village Residency for seniors.                            |
| 9:30 am - 10:00 am  | <b>D. Frischemeier, R. Biehler</b> Design of a teaching unit to develop primary school students’ reasoning about uncertainty in multi-step chance experiments | <b>M. Nekoufar</b> The knowledge of Statistics Teachers Assessment Literacy  |
| 10:00 am - 10:15 am | <b>SHORT BREAK</b>  |  |
| 10:15 am - 10:45 am | <b>J. Engel, T. Erickson, L. Martignon</b><br>Teaching about decision trees for classification problems   | <b>J. Morita, A. Steel, P. Guttorp</b> Beyond calculation: Teaching statistical thinking   |
| 10:45 am - 11:15 am | <b>L. Martignon, T. Erickson, J. Engel, U. Hoffrage, J. Woike</b> Fast and Frugal Trees for Decision Making   | <b>H. Vinje, T. Almøy, H. Brovold, S. Sænbø</b><br>Adaptive statistical education to motivate and promote the growing and diverse student population |



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|----------------------------|--|--|
| <b>11:15 am - 11:45 am</b> | <b>S. Habibullah</b> Extension of a 2018 Sample-Based Study on the Level of Awareness Regarding Big Data in the Statistics Community of Pakistan | <b>J. Mandrekar</b> Data driven decision making for survey reduction: case study from neurology research |
| <b>12:00 pm - 1:00 pm</b>  | <b>LUNCH</b>   |  |
| <b>1:30 pm - 7:00 pm</b>   | <b>EXCURSION</b>   |  |
| <b>7:00 pm</b>             | <b>CONFERENCE DINNER</b>   |  |

## FRIDAY AUGUST 16

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|-----------------------------------|--|--|
| <b>SINGLE SESSION</b>             | <b>MUSEUM THEATRETTE<br/>(Chairs Frischemeier and Chiesi)</b>  |  |
| <b>8:20 am - 8:30 am</b>          | <b>HOUSEKEEPING</b>  |  |
| <b>8:30 am - 9:30 am</b>          | <b>KEYNOTE Richard De Veaux</b><br>Data Science for all. Sure, but who, where, what, how and why?                                |  |
| <b>9:30 am - 10:00 am</b>         | <b>J. Nicholson</b> Significance is not the whole story – decision making in hypothesis testing has two sorts of possible errors |  |
| <b>10:00 am - 10:30 am</b>        | <b>D. Parsons, R. Stern, D. Stern</b> A problem-solving course in statistics for mathematical science students                   |  |
| <b>10:30 am - 11:15 am</b>        | <b>BREAK AND POSTER SESSION</b>  |  |
| <b>11:15 am - 11:45 am</b>        | <b>T. Lee</b> A Deep Learning Analytics to Facilitate Sustainability of Statistics Educator                                      |  |
| <b>11:45 am - 12:15 pm</b>        | <b>B. de Sousa, R. Gomes, L. Barata, A. Domingos</b> What to do when you do not see the data                                     |  |
| <b>12:15 pm - 1:15 pm</b>         | <b>KEYNOTE Gail Burrill</b><br>Data Literacy Should Not Be Optional: Implications for Statistics Educators and for IASE          |  |
| <b>1:15 pm - 1:30 pm</b>          | <b>WRAP UP</b>   |  |
| <b>FINAL REMARKS AND FAREWELL</b> |  |  |

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