

# SANDUN M. SILVA

Biostatistician | | Applied Statistician | | Data scientist

## PROFILE

An ambitious data scientist with 4+ years of experience in both industry and academia. Highly experienced in applying supervised to unsupervised machine learning models for personalization, process productivity and better decision making. Worked on cross-disciplinary projects including human resource, marketing, health and social science. Consulted over 1000 students in machine learning, business forecasting and predictive analytics at three ranking universities namely Monash University, Melbourne University (MBS) and Swinburne University of Technology, with a rating of 4.7 out of 5.

## CONTACT

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## HOBBIES

Reading books on "out of the box" theme  
Learning hunger

## EDUCATION

Swinburne University of Technology  
From May 2017 - January 2021



### PhD in Statistics



Supervisors: Professor Denny Meyer and Dr. Madawa Jayawardana  
(The project is done in collaboration with Virgin Pulse Global Challenge)

University of Colombo  
From November 2011 - November 2015



### B.Sc. (Hons Statistics and computer science)

Chartered Institute of Management Accountants (CIMA)  
**Advanced Diploma**



## WORK EXPERIENCE

University of Sydney (NHMRC Clinical Trial Centre)

Biostatistician  
December 2020 – Current

Studies:

1. BEAT-Calci - Better Evidence And Translation in Calciphylaxis study:
2. Genome-wide association study (GWAS): Develop new statistical methodology for genome-wide association studies (GWAS) for genetic research to investigate and identify efficient innovative method to filter single nucleotide polymorphisms or SNPs association of genetic variations with various diseases.
3. VESPRO - An individual patient data prospective meta-analysis of selective internal radiation therapy versus sorafenib for advanced, locally advanced, or recurrent hepatocellular carcinoma of the SARAH and SIRveNIB trials
4. PARTNER study: Investigations of the effectiveness of a new model of primary care management to treat knee pain and knee osteoarthritis

Virgin Pulse

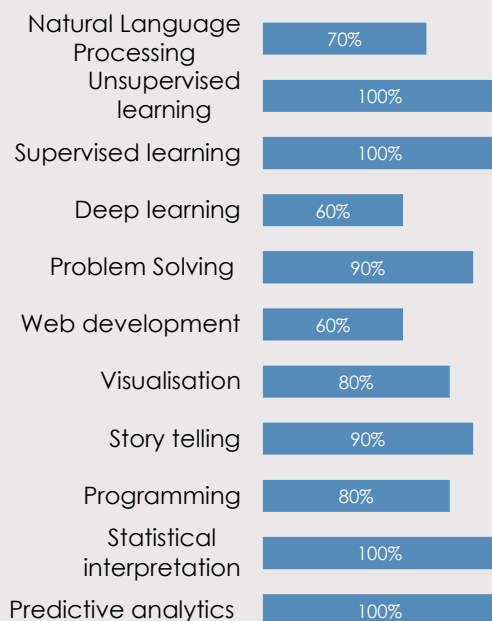
'PhD candidate' at Swinburne (as a 'Data Scientist' at Virgin Pulse).  
May 2017 – May 2020



Projects:

5. Outlier detection and improving the process of persons of interest detection
6. Modelling engagement dynamics of the mobile application users

## SKILLS



## REFERENCES

Prof. Denny Meyer  
Department of Statistics, Data Science  
and Epidemiology,  
Swinburne University of Technology  
Australia  
0410445857  
[dmeyer@swin.edu.au](mailto:dmeyer@swin.edu.au)

Dr. Madawa Jayawardana  
Statistical Consultant  
Office of Cancer Research,  
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Peter MacCallum Department of  
Oncology,  
The University of Melbourne, Parkville  
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Prof. George Athanasopoulos  
Professor and Deputy Head (Caulfield  
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Business Statistics  
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7. Complex model output visualization for better decision making (mixture Hidden Markov Model)
8. Personalizing the mobile application by providing challenging but achievable goals

MAS Holdings (Linea Aqua)



### Data and talent analyst

February 2016 – March 2017

#### Projects:

1. Employee attrition predictive model using demographic data, work related data and compensation data
2. Innovative Statistical method in employee evaluations and annual salary increments
3. Implement a scientific method in team member allocation for a maximum productivity
4. Data visualization for better decision making

Neilson Company (Pvt) Ltd



### Intern as a Market analyst

(RMS Client Service Unit)  
August 2014 – October 2014

## ACADEMIC EXPERIENCE

Monash University, Caulfield, Australia



Melbourne Business School,  
The University of Melbourne, Carlton campus,  
Carlton, Australia



Swinburne University, Hawthorn, Australia



### Teaching associate

(Data Mining, Advanced Statistical modelling,  
Time series etc.)

May 2017 – Current

## ACADEMIC AWARDS AND GRANTS

**Swinburne University Postgraduate Research Award** (Swinburne University Postgraduate Research Awards (SUPRAs) are awarded to students of exceptional research potential undertaking doctoral studies.)

**Travel grant** to attend Data Science, Statistics and Visualisation Conference, Kyoto, Japan, 13-15 August 2019, representing Swinburne University of Technology

**Second runner up** in representing the Department of Statistics, Data Science and Epidemiology (from Faculty of Health, Arts and Design category) at Swinburne Research Open Day Conference, Swinburne University of Technology, Melbourne, Victoria, Australia, 11 May 2018

## PROJECTS INVOLVED FOR PROBLEM SOLVING



### **Quantitative Researcher for VicRoads :**

This position is funded by a VicRoads tender, within the Centre for Mental Health, which sits in the Faculty of Health, Arts and Design and under Swinburne Research. This project has established the predictive value of offence data as a proxy measure of future crash risk and identified the important characteristics, license and offence histories of drivers with high future fatal and serious injury crash risk.

### **Currently enrolled as an External Statistical Consultant at Peter MacCallum Cancer Research Center, Victoria**



This study is looking for the predictors and survival analysis on the cause of death in "adolescents and young adult" cancer patients. The study will be utilizing various descriptive and predictive methods including survival analysis, random-forest and penalized logistic regression.