Nicholas Spyrison

Curriculum Vitae March 2020

- **Q** Department of Econometrics & Business Statistics, Monash University, VIC 3145, Australia.
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Education

2018-2021	Ph.D. Informaiton Technology	Monash University, Clayton, VIC, AUS
	Thesis: New Tools for User-guided Exploration of Linear Projections	
2008-2012	B.Sc. Statistics	Iowa State University, Ames, IA, USA

	Minors: physics and mathematics	
Employme	nt	
2020-2020	Teaching assistant, data exploration and visualisation – Monash University	
2018-2018		
2019-2019	Teaching assistant, business and economic statistics – Monash University	
2018-2019	Research officer, Criminology - Monash University	
2016-2018	Business Intelligence Developer - CPI Card Group Inc.	
	T-SQL - 2012 (SSMS, SSRS), R language, GitHub, Crystal Reports, Oracle BICS, Excel	
	 Supply chain reporting leading to more than \$4 M USD cost reduction 	
	 T-SQL development – mid-high level abstraction 	
	 4 reporting tools across multiple db instances 	
2015-2016	6 Business Intelligence Developer – United Dominion Realty Trust Inc. (UDR)	
	T-SQL - 2012 & 2016 (SSMS, SSRS, SSAS - MOLAP Cube), PowerBI, WebFOCUS – 8.0+, Excel	
	 T-SQL development – high level abstraction 	
	3 reporting tools across several db instances	
	On-call for enterprize-wide ETL process	
2014-2015		
	WebFOCUS – 8.0+, Excel	
	T-SQL development – high level abstraction	
2014-2014	Laboratory Technician – The Ames Laboratory & Iowa State University	
	CAD Inventor, LabVIEW, Excel	
2013-2014	Delivery Analyst - International Business Machines Cooporation (IBM)	
	Excel, VBA, R language	
	Weekly metric/KPI presentations to lower and mid management	
	IBM's process improvement methodology, root cause analysis, process behavior analysis	
	 Weekly metric/KPI presentations to lower and mid managment 	

• ETL scripting in VBA for greater than 1 FTE savings across the team 2012-2012 User Interface Developer - Iowa State University

R language, GitHub, Linux Shell

2010-2012 Laboratory Technician - The Ames Laboratory & Iowa State University

CAD Inventor, LabVIEW, LaTeX, Excel

2009-2009 Physics Tutor - Iowa State University

• Classical physics I & II with calculus

Honors and awards

2018 ACEMS Impact and Engagement Award 2018 UseR 2018! Datathon, third place 2012 LOOK UP ISU AWARDS AND HONORS HERE - SEVERAL 2009 LOOK UP ISU AWARDS AND HONORS HERE - SEVERAL 2008 American Legion award

Research

- ➤ High dimensional visualization via linear projections
 - Between 2018 and 2021 (expected) I researched high dimensional visualization espically trough animates across changing bases with various vizualization tours

- One Accepted publication, one R package publication
- Another 3 publications in the pipeline
- ➤ Consensed mater physcis (CMP),
 - Between 2009 and 2014 I researched pnictide superconductors (iron-based, type II superconductors)
 - 6 publications across various composistions and dopings
 - Drafting and fabrication of fabricated tunnel-diode resonators with 0.01ppm sensitivity for contactly resistivity mesurments
 - Cryogenic application up to and including including vacuum turbo-pumped, He3 systems

Membership

- ➤ Australian Centre of Excellence for Mathematical and Statistical Frontiers (ACEMS)
- > Statistical Society of Australia (SSA), Victorian branch
- ➤ American Statistical Association, district 4
- ➤ Melbourne Users of R Network (MelbURN)
- ➤ Denver R User Group
- ➤ Senver SQL Server User Group
- ➤ R-Ladies Melbourne
- ➤ Not so standard diviations (R podcast)
- ➤ The R-podcast
- ➤ Credidibly Curious(R podcast)

Publications

PhD thesis

Research papers

Software (R packages)

Presentations

Research papers, physics

Presentations, physics