



Sports Analytics IV

Produced by Dr. Mario
UNC STOR 390

Educating Yourself

- Academic Journals in Sports
 - Journal of Quantitative Analysis in Sports (JQAS)
 - Founded by Ben Alamar (2011-2014)
 - Acquired by American Statistical Association
 - Editor: Jim Albert
 - Acceptance Rate of 10%
 - Journal of Sports Analytics
 - Less Consumed with Technical Skills
 - More Consumed with Novel Applications
 - Mark Cuban is Involved

Working in Sports Analytics, Tim Swartz, 2018 (Seen in The American Statistician)



Educating Yourself

- Academic Journals in Operations Research

Journal	SJR	Sports Pubs
European Journal of Operational Research (EJOR)	2.505	17
IMA Journal of Management Mathematics (IMAJMM)	0.857	10
Journal of the Operational Research Society (JORS)	1.004	9
Management Science	3.885	6
Annals of the Operations Research	1.009	6
Interfaces	0.837	4
Operations Research	2.940	2
Computers and Operations Research	2.326	2



Working in Sports Analytics, Tim Swartz, 2018 (Seen in The American Statistician)

Educating Yourself

- Academic Journals in Statistics

Journal	SJR	Sports Pubs
Chance Magazine	NA	12
Journal of the Royal Statistical Society, Series A	1.368	8
Journal of Applied Statistics	0.402	8
Journal of Data Science	NA	4
The Annals of Applied Statistics	1.793	3
The American Statistician (TAS)	0.517	2
South African Statistical Journal	0.122	2
Journal of the American Statistical Association (JASA)	2.869	1
The Australian and New Zealand Journal of Statistics (A&NZJS)	0.365	1
Statistica Neerlandica	0.402	1
Brazilian Journal of Probability and Statistics	0.470	1



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Educating Yourself

- Special Journal Issues on Sports Analytics
 - *Statistical Analysis and Data Mining: The ASA Data Science Journal* – Volume 9, Issue 5, 2016
 - *Data Mining and Knowledge Discovery* – Volume 31, Issue 6, 2017
 - *Electronic Journal of Applied Statistical Analysis* – Volume 10, Issue 3, 2017
 - *Machine Learning* – 2018
 - *International Journal of Forecasting* - 2018

Working in Sports Analytics, Tim Swartz, 2018 (Seen in *The American Statistician*)



Educating Yourself

- Academic Journals on Sports Science
 - *Journal of Sports Science and Medicine*
 - *Journal of Sports Sciences*
 - *European Journal of Sport Science*
 - *Journal of Human Sport and Exercise*

Working in Sports Analytics, Tim Swartz, 2018 (Seen in The American Statistician)



Educating Yourself

- Miscellaneous Academic Journals on Sports
 - Other Journals Exist for Sports
 - Less Tied to Operations Research or Statistics
- Examples
 - *Sports Engineering*
 - *Sport and Society*
 - *Sport Business and Management*
 - *International Journal of Performance Analysis in Sport*
 - *International Journal of Sport Science and Coaching*
 - *International Journal of Computer Science in Sport*

Working in Sports Analytics, Tim Swartz, 2018 (Seen in The American Statistician)



Educating Yourself

- Blog Sites
 - General (Top 10 Using Search and Social Metrics)
 - Action Network
 - Agile Sports Analytics
 - Harvard College Sports Analysis
 - iSports Analysis
 - Team Sports Analysis
 - Stat Sheet Stuffer
 - Analysis Pro
 - MIT Sloan Experts
 - Five Thirty Eight
 - Spiideo

Aggregated on blog.feedspot.com/sports_analytics_blogs



Educating Yourself

- Blog Sites
 - Basketball
 - Hoops Hype
 - 82games
 - Squared 2020
 - NBA Stuffer
 - Baseball
 - Fan Graphs
 - Sandlot Stats
 - Beyond the Box Score
 - Baseball With R



Educating Yourself

- Blog Sites
 - Hockey
 - Hockey Graphs
 - Corsica Hockey
 - Hockey Analytics
 - Football
 - Football Outsiders
 - Advanced Football Analytics
 - Fantasy Football Analytics



Educating Yourself

- Blog Sites
 - Soccer
 - StatsBomb
 - 5 Added Minutes
 - manVmetrics
 - American Soccer Analysis
 - Soccermetrics



Getting Educated

- **Masters Associated with Sports Analytics**
 - Adelphi University (Online)
 - American University (Online)
 - California University of Pennsylvania (Online)
 - Indiana University Purdue University Indianapolis
 - Marquette University (Hybrid)
 - Northwestern University
 - University of North Texas
- **Certificates for Sports Analytics**
 - Columbia University
 - Northwestern University
 - Wilmington University

Aggregated on discoverdatascience.org/related-programs/sports-analytics/



Getting Educated

- Unconventional Programs

- Sports Management Worldwide
 - Founded by Dr. Lynn Lashbrook
 - Degrees
 - Masters of Sports Leadership
 - MBA in Sports Leadership
 - Doctorate in Sports Management
 - Very Flexible Course Selection
 - Pay by Course
- Udemy
 - Courses Around \$9.99



Getting Educated

- PhD in Data Science

- Boise State (Computer Science)
- Bowling Green State University
- Brown University (Computer Science)
- Chapman University
- Clemson (Biomedical)
- George Mason University (Computer Science)
- Harrisburg University of Science and Technology
- Icahn School of Medicine at Mount Sinai (Biomedical)
- Kennesaw State University
- New Jersey Institute of Technology (Business)
- New York University
- Northcentral University

Aggregated on <https://www.discoverdatascience.org/programs/data-science-phd/>



Getting Educated

- PhD in Data Science
 - University of Tennessee
 - University of Buffalo (Computer Science)
 - University of Colorado – Denver
 - University of Maryland
 - University of Massachusetts (Business)
 - University of Nevada – Reno
 - University of Southern California
 - University of Vermont (Engineering)
 - University of Washington – Seattle
 - University of Wisconsin – Madison (Biomedical)
 - Vanderbilt University (Biomedical)
 - Washington University in St. Louis (Computer Science)
 - Yale

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Educating Others

- Criteria of a Good Paper
 - Address a Real Problem in Sports
 - Contain Statistical Novelty
- Mainstream Adoption
 - Less Technical
 - More Visual
 - Focus on Less Analyzed Sports
 - Avoid “Black Box” Approaches

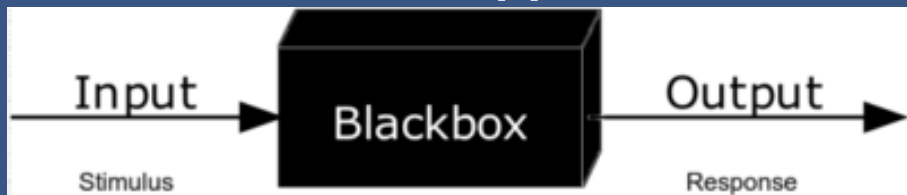


Image from [en.Wikipedia.org/wiki/Black_box](https://en.wikipedia.org/wiki/Black_box)



Educating Others

- Article by Yarrow and Kranke
 - Three Approaches to Sports Statistics
 - Instrumentalist - Science
 - Romantic – Social
 - Performativity – Connects the Two



	Instrumentalist	Romantic	Performative
<i>View of sports statistics</i>	Positive: better sports	Negative: less meaningful sports	Contingent: different conduct of sports
<i>Argumentative thrust</i>	Optimal performance	Lost authenticity	Agential qualities of statistics
<i>Concept of value</i>	Uncovered by statistics	Undermined by statistics	Enacted by statistics
<i>Examples</i>	Improving training and regeneration; Adjusting tactical preparation	Objectifying sporting performance; Commodifying competitions and events	Refashioning performance parameters; Redirecting valuation practices



Final Inspiration

Being a sports fan is about embracing the accomplishments of others as if they were your own.

- Mahatma Mario