# MAJ Daniel Baller

Assistant Professor, United States Military Academy 3213 Meigs Rd. West Point, NY 10996

Updated: 29 June 2021

$\mathbf{r}_{\mathbf{A}}$	ucat	·ion
$\Gamma / (1)$	บตลเ	, 1( ) [ ]

M.S., Operations Research, Georgia Institute of Technology	2018
<b>B.S.</b> , Operations Research with Honors, The United States Military Academy	2008

### Academic Experience

Director, Center for Data Analysis and Statistics (CDAS)	
United States Military Academy	2021-Present
Assistant Professor, Department of Mathematical Sciences	
United States Military Academy	2020-Present
Instructor, Department of Mathematical Sciences	
United States Military Academy	2018-2020

#### Courses Directed

# United States Military Academy

MA376 - (Assistant) Applied Statistics	2021
MA206 - Introduction to Probability and Statistics	2020-2021
MA206 - (Assistant) Introduction to Probability and Statistics	2020
MA206 - Introduction to Probability and Statistics	2019

### Courses Taught

#### United States Military Academy

MA376 - Applied Statistics	2021
MA206 - Introduction to Probability and Statistics	2019 - 2021
MA103 - Mathematical Modeling and Introduction to Calculus	2018

### **Short Courses**

OS305 - Introduction to Advanced Data Analysis	s (2 Iterations) 2020-2021
--	----------------------------

# Refereed Publications

Thomas, D.M., Siegel, B., **Baller, D.**, Lindquist, J., Cready, G., Zervios, J.T., Nadglowski, J.F., Jr. and Kyle, T.K. (2020), Can the Participant Speak Beyond Likert? Free-Text Responses in COVID-19 Obesity Surveys. Obesity, 28: 2268-2271. https://doi.org/10.1002/oby.23037

Baller, D., Thomas, D., Cummiskey, K., Bredlau, K., Schwartz, N., Orzechowski, K., Miller, R., Odibo, A., Shah, R., Salafia, C. (2019) Gestational growth trajectories derived from a dynamic fetal-placental scaling law, *Journal of the Royal Society Interface*, Impact factor: 3.224. https://royalsocietypublishing.org/doi/10.1098/rsif.2019.0417

Adams, B., Baller, D., Jonas, B., Joseph, A., Cummiskey, K., Computational Skills for Multivariable Thinking in Introductory Statistics. *Journal of Statistics Education*. https://doi.org/10.1080/10691898.2020.1852139

1 1/3

#### **Presentations**

**Baller, D.**, Thomas, D., Cummiskey, K., Bredlau, K., Schwartz, N., Orzechowski, K., Miller, R., Odibo, A., Shah, R., Salafia, C. (2019) Gestational growth trajectories derived from a dynamic fetal–placental scaling law, *MAA MathFest*.

# Conference Proceedings

Morin, T., Clark, N., **Baller, D.**, Watts, K. (2018) Estimating Phase Angle Percentiles in Elite Athletes, *Experimental Biology*. Abstract Published in *The FASEB Journal*, April, 2020, Impact factor: 5.391, presentation canceled due to COVID-19.

Aloma, Z., Hughes, D., **Baller, D.**, Thomas, D. (2018) The Pitching Problem: Proxy Measures for the Identification of Pitcher Fatigue, *Experimental Biology*. Abstract Published in *The FASEB Journal*, April, 2020, Impact factor: 5.391, presentation canceled due to COVID-19.

Baller, D., Johnson, A., McCulloh, I., Schrieber, C., Carley, K. (2008) Specific Communication Network Measure Distribution Estimation I, Sunbelt XXVIII, International Sunbelt Social Network Conference. https://assets.noviams.com/novi-file-uploads/insna/PDFs/Sunbelt\_2008.pdf

**Baller, D.**, Lospinoso, J. (2008) Specific Communication Network Measure Distribution Estimation II, 13th ICCRTS. http://www.dodccrp.org/events/13th\_iccrts\_2008/CD/html/papers/251.pdf

Baller, D., Lospinoso, J., Johnson, A. (2008) An Empirical Method for the Evaluation of Dynamic Network Simulation Methods, 2008 International Conference on Information & Knowledge Engineering, IKE 2008.

# Funding Awarded

Grant, Faculty Development Research Fund (FRF)

2019

### Professional Memberships

Mathematical Association of America	2019
Alpha Pi Mu - Industrial Engineering Honor Society	2018
Institute of Industrial and Systems Engineers (IISE)	2016-2018
Pi Mu Epsilon - Mathematics Honors Society	2007

#### Faculty Development

Panelist   Technology in the Classroom, MA206	2021
Presenter   Department Bayesian Statistics Study Group	2019

#### Student Research

Co-Advisor, Honors Thesis. Previte, Peter, "The Anti-Cycle in Baseball."

Co-Advisor, Honors Thesis. Morin, Thomas, "Estimating Phase Angle Percentiles in Elite Athletes."

Co-Advisor, Honors Thesis. Hurtubise, Jacob, "Analysis of Base Stealing – the fastest 3.3 seconds in sports."

Co-Advisor, Honors Thesis. Aloma, Zachary, "The Pitching Problem: Proxy Measures for the Identification of Pitcher Fatigue."

2

Co-Advisor, Honors Thesis. Seigel, Benjamin, "The hidden message in letters of recommendation: A natural language processing analysis of letters of recommendation at the United States Military Academy"

Co-Advisor, Honors Thesis. Rose, Frank, "Two-Stage Stochastic Optimization for C-UAS Acquisition"

Second Reader, Nicosia, Gino, "Modeling Madness."

Second Reader, Wilby, Bridget, "Forecasting Medical Screening Demand: Analysis of the Cadet Foreign Travel Medical Screening Process." Hollis Award Winner 2019.

Second Reader, Cunningham, Nicholas, "Measuring the Effect of Writing Centers Using Statistical Methods"

# Institutional and Student Developmental Service

Reviewer for the American Journal of Clinical Nutrition (the top ranked journal for original research publications in nutrition) Impact Factor 6.77 2020-Present Member, Dean's Remote Teaching Distance Education Working Group (RTDEWG) 2020 Triage Judge, Interdisciplinary Contest in Modeling by COMAP 2020 Reviewer for PLOS ONE, Impact Factor 2.74 2019-Present Military Intelligence Branch Mentor 2018-Present IISE Graduate Chapter President, Georgia Institute of Technology 2017 Department Photographer 2018-Present

# Selected Military Service

Yongsan Garrison, KOR

Assistant Operations Officer, 501st MI BDE

Camp Humphreys, KOR

Company Commander, A CO, 719th MI BN, 501st MI BDE

Camp Casey, KOR

Battalion Intelligence Officer, 2-9 Infantry Battalion, 1 ABCT

#### **Deployments**

Operation Iraqi Freedom/Operation New Dawn, Iraq 2010

#### Selected Awards

IISE Innovative Design Competition, 2nd Place 2017

Meritorious Service Medal (1)

Army Commendation Medal (3)

Army Achievement Medal (1)

Air Assault Badge

Overseas Service Ribbon (3)

Office of the Secretary of Defense Network Science Excellence Award – Best Student Project Network Science – United States Military Academy, West Point, New York, 2008

3