

Professional
Consulting
Experience

Sparta Science

- Gullickson, J., Mayberry, J. K., Gale, L., and Killick, L. (2020). Not throwing away my shot: an analysis of shot features in men's collegiate water polo. *International Journal of Performance Analytics*, 20(2), 240{253.
- Graham, J., and Mayberry, J. (2020). The Cost of Losing Team Bias in Water Polo. In *The Economics of Aquatic Sports* (pp. 25{37). Springer. Journal Publications
- Hill, R. I., Rush, C., and Mayberry, J. K. (2018). Larval food limitation in a Speyeria butterfly (Nymphalidae): how many butterflies can be supported? *Insects*, 9(4).
- Minnes, M., Mayberry, J., Soto, M., and Hargis, J. (2018). Practice makes deeper? Regular reflective writing during engineering internships. *Journal of Transformative Learning*, 4(2).
- Galal, S., Vyas, D., Mayberry, J., Rogan, E., Patel, S., and Ruda, S. (2018). Use of Standardized Patient Simulations to Assess Impact of Motivational Interviewing Training on Social{Emotional Development. *Pharmacy*, 6(3), 65.
- Mayberry, J. K., Patterson, B., and Wagner, P. (2018). Improving vertical jump profiles through prescribed movement plans. *The Journal of Strength and Conditioning Research*, 32(6), 1619{1626.
- Galal, S. M., Mayberry, J. K., Wang, A., and Tran, T. (2017). Examining differences between P1 versus P2 students as teaching assistants in a P1 skills-based course. *Currents in Pharmacy Teaching and Learning*, 9(4), 537{542.
- Pandey, R., Mayberry, J., and Hargis, J. (2016) How does the structure of a college chemistry examination affect pedagogy *Journal of Science education* Volume 17, Number 2, 53-57.
- Cavanaugh, C., Hargis, J., and Mayberry, J. (2016). Participation in the Virtual Environment of Blended College Courses: An Activity Study of Student Performance. *The International Review of Research in Open and Distributed Learning*, 17(3).
- Graham, J., and Mayberry, J. (2016). The ebb and flow of official calls in water polo. *Journal of Sports Analytics*, 2(2), 61{71.
- Cavanaugh, C., Gajer, E., Mayberry, J., O'Connor, B., and Hargis, J. (2015). Kilimanjaro: A case of meaningful adventure and service learning abroad. *Journal of International Students*, 5(4), 420{433.
- Sajuthi, A., Carrillo-Zazueta, B., Hu, B., Wang, A., Brodnansky, L., Mayberry, J., and Rivera, A. S. (2015). Sexually dimorphic gene expression in the lateral eyes of *Euphilomedes carcharodonta* (Ostracoda, Pancrustacea). *EvoDevo*, 6(1), 34nansky, L., Mayberry, J.

- Durrett, R., Foo, J., Leder, K., Mayberry, J., and Michor, F. (2011). Intratumor heterogeneity in evolutionary models of tumor progression. *Genetics*, 180(1), 110.
- Durrett, R., Foo, J., Leder, K., Mayberry, J., and Michor, F. (2010). Evolutionary dynamics of tumor progression with random fitness values. *Theoretical Population Biology*, 78(1), 54-66.
- Durrett, R., and Mayberry, J. (2010). Evolution in predator-prey systems. *Stochastic Processes and Their Applications*, 120(7), 1364-1392.
- Mayberry, J., and others. (2009). Gaussian perturbations of circle maps: a spectral approach. *The Annals of Applied Probability*, 19(3), 1143-1171.
- Braun, D., Mayberry, J., Malagon, A., and Schlicker, S. (2005). A singular introduction to the Hausdorff metric geometry. *Pi Mu Epsilon Journal*, 12(3), 129-138.

Conference
Proceedings and
Presentations

- Wu, A., Nakka, A., Mayberry, J., and Iyengar, J. (2022) *The Myth of Patient Participation in Shared Decision Making*. Annual Meeting of the Western Orthopaedic Association, Maui, HI.
- Verlin, N., Gullikson, J., Mayberry, J. K., and Cliburn, D. (2019). PoloTrac: A Water Polo Tracking and Advanced Statistics Application. In Proceedings of the 7th International Conference on Sport Sciences Research and Technology Support (icSPORTS 2019). Vienna, Austria.
- Williams, C. A., VanNess, J. M., Rossi, J., Mayberry, J., and Jensen, C. D. (2019). Lower Limb Kinematic Assessment to Predict Water Polo Performance: 3455 Board# 143 June 19: 30 AM-11: 00 AM. *Medicine and Science in Sports and Exercise*, 51(6S), 949.
- Lydon, W. P., Vanness, J. M., Mayberry, J., Rossi, J., and Jensen, C. D. (2018). Sparta Testing and Vertical Jump Co-predict Fastball Speed in Collegiate Pitchers: 1867 Board 128 May 31 3. *Medicine and Science in Sports and Exercise*, 50(5S), 445.
- Mitchell, V. R., Lydon, W. P., Vanness, J. M., Mayberry, J., Rossi, J., and Jensen, C. D. (2018). Hit Or Miss: Kinematic Predictors Of In-game Performance In Collegiate Pitching. *Medicine and Science in Sports and Exercise*, 50(5S), 664.
- Mayberry, J. (2017) Evaluating Athlete Wellness. Joint Mathematical Meetings, Spe-

Other
Presentations

- *A different kind of modeling in the pool* Avinash Raina High School Math Competition, University of the Pacific, April 2016.
- *Riding the analytics wave to water polo success.* Data Science Hot Topics Seminar, University of the Pacific, San Francisco Campus, October 2016.
- *A different kind of modeling in the pool* Secondary Integration of Math Modeling and Simulation (SIMMS) Workshop, San Joaquin District Office, July 2015.
- *Riding the analytics wave to water polo success.* Sport Technology Seminar, University of the Pacific, April 2015.
- *Riding the analytics wave to water polo success.* Homecoming Talk, University of the Pacific, October 2015.
- *Flipped Learning and Camtasia* Secondary Integration of Math Modeling and Simulation (SIMMS) Workshop, San Joaquin District Office, January 2015.
- *Riding the analytics wave to water polo success.* Data Science Hot Topics Seminar, University of the Pacific, San Francisco Campus, October 2014.
- *What are the chances? Paradoxes in probability.* Pacific High School Math Competition, April 2012
- *Heterogeneity in evolutionary models for tumor progression,* Mini-symposium on Evolutionary Dynamics of Cancer, ICIAM meeting, Vancouver, Canada, July 2011.
- *Evolution in predator-prey systems,* Math Colloquium, Oregon State University, May 2011
- *Traveling waves of selective sweeps,* Session on Stochastic Models in Population Ge-
- *Evolution in prey systems*

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Honors and Awards

- Long Foundation Fellowship, Thomas J. Long Foundation, 2018-2020. Support for "Punk, Metal, and the Meaning of Life" course.
- Pacific Arts and Lecture Committee Fellowship, Pacific Arts and Lectures Committee, 2018. Support for the "The Revolution will be DIY" art exhibit and concert.
- United Methodist Teacher/Scholar Award, 2017.
- Technology and Innovation Award, Pacific Sports Analytics Conference, 2017.

Professional Certificates

- Society of Actuaries Exam SRM (Score: 8), 2020
- Society of Actuaries Exam P (Score: 8), 2018

Service and Advising

Book Reviews:

- Bruce, P. (2013) *Stats: Data and Analytics (SDA)*, Wiley.

Referee:

- *Annals of Applied Probability*
- *Biology Letters*
- *Evidence Based Medicine*
- *SIAM Journal on Applied Dynamical Systems*
- *Theoretical Population Biology*

Student Advising:

- Advisor for pure and applied math majors and minors, fall 2010 - present
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- STEM Retention Discussion Committee, Member, fall 2017
- LMS Vendor Vetting Group, Member, spring 2015
- Assistant Chaplain Hiring Committee, Chair, fall 2014
- Student Media Board, Member, fall 2013 - 2015; 2019 - 2021
- Data Analytics Committee, Member fall 2013
- Classroom Building Recycling Co-captain, fall 2012 - present

Community Service:

- Performed data analysis on Stockton Police Department "Stop and Search" data for the non-profit organization Faith in the Valley, spring 2022.
- Ran activity and discussion on Data Analysis with Google Spreadsheets for a group of secondary school teachers visiting Pacific, summer 2016.
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