Austin Menger PhD

Research Interests: Survival Analysis, Bayesian Statistical Methodology, Machine Learning, Longitudinal Data Analysis, Psychometrics, Causal Inference, Statistical Inference, Healthcare Applications, Mental Health Applications.

Professional Appointments:

Jan 2025-

Founder & Chief Executive Officer Bridge Mental, Inc. New York, NY

Aug 2018-

Founder & Principal Scientist Menger Analytics New York, NY

Aug 2021-Dec 2021

Adjunct Professor in Department of Mathematics & Statistics Connecticut College New London, CT

Sept 2017-Dec 2022

Graduate Assistant in the Department of Statistics
Research Assistant at Pratt & Whitney
Research Assistant for NIH R01 Grant Proposal
Statistical Consultant at University of Connecticut Statistical Consulting Services
Graduate Assistant at Center for Students with Disabilities
University of Connecticut

May 2017-Sept 2017

Storrs, CT

Lead Data Scientist New York Engineers New York, NY

Oct 2016-May 2017

Database Analyst Reed Exhibitions Norwalk, CT

Education:

Aug 2017-May 2023

University of Connecticut (Storrs, CT)

Doctor of Philosophy in Statistics

Certificate in College Instruction

Dissertation: Statistical Methods for Survival Data in the Presence of Competing Risks with

Cure Fractions and Masked Causes

Aug 2016-Aug 2017

Columbia University (New York, NY)

Master of Science in Applied Analytics

Aug 2012-May 2016

Georgetown University (Washington DC)

Bachelor of Science (with Honors) in Mathematics

Honors Thesis: A Flexible Longitudinal Model for Count Data

Teaching Experience:

Connecticut College - Primary Instructor

Fall 2021 Advanced Regression Techniques (STA 207)

University of Connecticut - Primary Instructor

Fall 2022	Contracted to make STAT 1100Q fully accessible for those with disabilities
Spring 2022	Elementary Concepts of Statistics (STAT 1100Q)
Fall 2021	Elementary Concepts of Statistics (STAT 1100Q)
0	C+++:-+:

Summer 2021 Statistical Methods (Calculus Level 1) (STAT 3025Q)

Spring 2021 Elementary Concepts of Statistics (STAT 1100Q)

Fall 2020 Elementary Concepts of Statistics (STAT 1100Q)

Summer 2019 Elementary Concepts of Statistics (STAT 1100Q)

Fall 2018 Introduction to Mathematical Statistics I (STAT 3375Q)

Fall 2018 Statistical Methods (Calculus Level 1) (STAT 3025Q)

Summer 2018 Elementary Concepts of Statistics (STAT 1100Q)

University of Connecticut - Teaching Assistant

Fall 2021 Elementary Concepts of Statistics (STAT 1100Q) – 2 sections

Summer 2020 Introduction to Statistics I (STAT 1000Q) – 1 section

Spring 2020 Elementary Concepts of Statistics (STAT 1100Q) – 1 section

Spring 2018 Introduction to Statistics I (STAT 1000Q) – 3 sections Fall 2017 Introduction to Statistics I (STAT 1000Q) – 5 sections

University of Connecticut - Complementary Roles

Spring 2022	Department Tutor
Spring 2018	Department Tutor

Fall 2017 Course Grader for Statistical Methods (Calculus Level 1) (STAT 3025Q)

Fall 2017 Department Tutor

Georgetown University - Teaching Assistant

Spring 2016	Computer Science Math Methods ((COSC 030) – half of class

Spring 2016 Probability & Statistics (MATH 040) – 2 sections Fall 2015 Multivariable Calculus (MATH 137) – half of class

Fall 2015 Computer Science Math Methods (COSC 030) – half of class

Fall 2015 Probability & Statistics (MATH 040) – 2 sections Spring 2015 Probability & Statistics (MATH 040) – 2 sections Fall 2014 Probability & Statistics (MATH 040) – 2 sections Spring 2014 Probability & Statistics (MATH 040) – 2 sections

Honors/Awards:

Statistics/Analytics

Apr 2024	One of the Most-Cited Papers, International Journal of Nursing Knowledge
Nov 2022	2 nd Place Poster Submission Award, NESS NextGen Data Science Day
Jun 2022	Pre-Doctoral Award, Department of Statistics, University of Connecticut
Dec 2021	Letter of Recognition, New England Statistical Society, Establishing NextGen Scholarship
Nov 2021	Teaching Award, Department of Statistics, University of Connecticut
Jun 2021	Pre-Doctoral Award, Department of Statistics, University of Connecticut
Sep 2020	Service Award, Department of Statistics, University of Connecticut
Jan 2018	Distinction in Teaching, University of Connecticut, One of the Top-Rated Instructors
Jan 2017	Team of the Year, Data Analytics Team, Reed Exhibitions
May 2016	Completed Honors Thesis in Statistics at Georgetown University (only student in dept.)

University of Connecticut

Sep 2019	Elected President of the Department of Statistics Graduate Student Committee
Sep 2018	Elected Secretary of the Department of Statistics Graduate Student Committee

Fostering an increased sense of camaraderie through shared experiences.

Columbia University

Aug 2016 Co-founder & Vice President Analytical Alchemist Club

Promoting analytics solutions to improve education and public services in our community.

Georgetown University

May 2016 Bachelor of Science with Honors (honors research thesis in statistics)

First Honors

Georgetown University Rugby Football Club

Leadership and Service

Nov 2024	Poster Judge, NESS NextGen Data Science Day (Babson College)
Jun 2023	Poster Judge, 36 th Annual New England Statistical Society Symposium
Apr 2023	Professional Judge, DataFest at Wesleyan University, American Statistical Association
Nov 2022	Invited Panelist, NextGen Data Science Day roundtable, New England Statistical Society
Oct 2022	Volunteer, UConn Statistics 60th Anniversary Conference: Excellence in Statistics
May 2022	Volunteer, 35 th Annual New England Statistical Society Symposium
Apr 2022	Professional Judge, DataFest at Wesleyan University, American Statistical Association
Aug-Nov 2021	New England Statistical Society: Outreach Lead for Data Science Day (over 148 schools)
Nov 2020	Invited Chair, Careers in Data Science Panel Session, New England Statistical Society
Aug-Nov 2020	New England Statistical Society: Outreach Lead for Data Science Day (over 148 schools)
Mar 2020-	Founder & Lead, NextGen Scholarship for Underrepresented Minorities in Data Science
Jan 2020-	New England Statistical Society: Head of Diversity, Inclusion, & Outreach Sub-Committee
Jan 2020-21	Search Lead for Student Members, NextGen Committee, New England Statistical Society
Oct 2019-	New England Statistical Society: Invited NextGen Committee Member
Sep 2019-20	Elected President, UConn Department of Statistics Graduate Student Committee
Sep 2019-20	Department Organizer, Paper of the Month Discussion, UConn Department of Statistics
Sep 2018-19	American Statistical Association: Invited Student Chapter Representative (CT)

Sep 2018-19	Elected Secretary, UConn Department of Statistics Graduate Student Committee
Aug 2018-23	Columbia University Alumni Interviewer
Apr 2018-21	Consultant, DataFest at Wesleyan University, American Statistical Association
Sep 2017-23	Active Member, UConn Department of Statistics Graduate Student Committee
Aug 2017-	Georgetown University Alumni Interviewer
Aug 2016-17	Co-founder & Vice President, Analytical Alchemist Club, Columbia University

Professional Society Membership

Columbia University Founders Society (invited lifetime member)

Institute of Mathematical Statistics

International Society for Bayesian Analysis (lifetime member)

American Statistical Association

New England Statistical Society (invited committee member)

Sigma Xi Scientific Research Honor Society (elected associate member by Georgetown University chapter)

Mentorship

Oct 2024- Anusha Natarajan, MS

Current Role: Project Data Analyst at Elsevier

Mentorship: Ongoing Publication

Mar 2024- Marah Al Smadi

Current Role: Doctoral Student at the University of Connecticut School of Nursing

Mentorship: Multiple Publications

May 2023- Shike Xu, MS

Current Role: Doctoral Student at the Department of Statistics, University of Connecticut

Mentorship: Work on Ph.D. Dissertation

Mar 2023- Theodora Moldovan

Current Role: MSc Data Science Student at Uppsala University

Mentorship: Multiple Publications

Feb 23-Apr 25 Harshita Rayapureddy

Current Role: Rotational Analyst at ION Mentorship: Multiple Publications

Sep-Nov 2022 Yue Yu, MS

Current Role: Analytics at Deloitte, Banking & Capital Markets

Mentorship: Award-winning Poster Presentation at NESS NextGen Data Science Day

Nov 2020-21 Emily Perri

Current Role: Social Work/Pre-Law at the University of Connecticut

Mentorship: UConn IDEA Grant Program Submission

Extracurricular/Hobbies/Interests

Spending quality time with family

Hiking

Skiing, American football, piano

Peer-Reviewed Publications

*Current intern/student at the time of work

- 1. Abu Khait, A., **Menger, A.**, Al-Hammouri, M., ALhamdan, A., Issa, E., Rayapureddy*, H., Hamaideh, S. (2025). The relationship between insomnia and depressive symptoms in a sample of patients with schizophrenia: do psychotic symptoms play a mediating role?. *Journal of Psychiatric and Mental Health Nursing*, Advance online publication. https://doi.org/10.1111/jpm.13175
- Abu Khait, A., Menger, A., Shahrour, G., ALhamdan, A., Issa, E., Hamaideh, S. (2025). The association between
 psychotic symptoms and suicidal ideation in a sample of patients with schizophrenia: the moderating effect of
 the frequency of suicidal thoughts. Archives of Psychiatric Nursing, 54, 63-72.
 https://doi.org/10.1016/j.apnu.2025.01.004
- 3. Abu Khait, A., **Menger, A.**, Al-Atiyyat, N., Hamaideh, S., Al-Modallal, H., Rayapureddy*, H. (2024). The association between proneness to smartphone addiction and social anxiety among school students and the mediating role of social support: a call to advance Jordanian adolescents' mental health. *Journal of the American Psychiatric Nurses Association*, 31(2), 183-196. https://doi.org/10.1177/10783903241261047
- Abu Khait, A., Menger, A., Hamdan-Mansour, A., Aldalaykeh, M., Hamaideh, S., Al-Mrayat, Y., Nusair, H. (2024). The association between coping strategies and psychological and emotional distress among healthcare providers caring for autistic children in Jordan. Western Journal of Nursing Research, 46(8), 571-582. https://doi.org/10.1177/01939459241254782
- Menger, A., Sheikh, M.T., Chen, M-H. (2024). Bayesian modeling of survival data in the presence of competing risks with cure fractions and masked causes. Sankhya A, 86-A, S199-S227. https://doi.org/10.1007/s13171-023-00335-5
- 6. Abu Khait, A., **Menger, A.**, Rababa, M., Moldovan*, T., Lazenby, M., Shellman, J. (2024). The mediating role of religion and loneliness on the association between reminiscence functions and depression: a call to advance older adults' mental health. *Psychogeriatrics*, *24*(1), 58-71. https://doi.org/10.1111/psyg.13041
- Abu Khait, A., Menger, A., Al-Modallal, H., Abdalrahim, A., Moldovan*, T., Hamaideh, S. (2024). Self-transcendence as a mediator of the relationship between reminiscence functions and death anxiety: implications for psychiatric nurses. *Journal of the American Psychiatric Nurses Association*, 30(3), 646-662. https://doi.org/10.1177/10783903231174464
- Abu Khait, A., Menger, A., Mahmoud, K., Hamaideh, S. (2023). A moderated mediation model of social support on the association between coping strategies and psycho-emotional distress of healthcare professionals caring for children with autism. *Issues in Mental Health Nursing*, 44(9), 879-890. https://doi.org/10.1080/01612840.2023.2232860
- Sandilos, G., Menger, A., Koorogayala, K., Zhu, C., Daneshpooy, S., Gefen, R., Kovacs, J., Giugliano, D., Kwiatt, M., McClane, S. (2023). Diagnostic accuracy of endoscopy in determining rectal tumor proximity to the peritoneal reflection. *International Journal of Colorectal Disease*, 38(1), article number 109. https://doi.org/10.1007/s00384-023-04392-y
- 10. Abu Khait, A., **Menger, A.**, Shellman, J., Al-Modallal, H., Hamaideh, S. (2022). Confirmatory factor analysis of the Arabic version of the reminiscence functions scale with strict measurement invariance across gender. *Perspectives in Psychiatric Care*, 58(4), 2145-2153. https://doi.org/10.1111/ppc.13041
- Abu Khait, A., Menger, A., Hamaideh, S.H., Al-Modallal, H., & Abdalrahim, A. (2022). Nursing students' knowledge about behavioral and biopsychosocial domains of dementia: a cross-sectional survey study. International Journal of Nursing Knowledge, 33(2), 116-127. https://doi.org/10.1111/2047-3095.12343
- 12. Abu Khait, A., **Menger, A.**, Shellman, J. (2022). Psychometric testing of the Arabic version of the reminiscence functions scale. *Journal of Nursing Measurement*, 30(3), 388-406. https://doi.org/10.1891/JNM-D-20-00113
- 13. Menger, R., Shaw, T., Bunch, J., Barry, J., Marciano, G., **Menger, A.**, Martino, A., Lenke, L., & Vitale, M. G. (2020). Health care lobbying, political action committees, and spine surgery. *Spine*, *45*(24), 1736-1742. https://doi.org/10.1097/BRS.000000000000003693

- Morris, D.S., Sellers, K.F., Menger, A. (2017). Fitting a flexible model for longitudinal count data using the NLMIXED procedure. In SAS Global Forum Proceedings; SAS Institute: Cary, NC, USA. https://support.sas.com/resources/papers/proceedings17/0202-2017.pdf
- 15. Menger, R., Menger, A., Nanda A. (2016). Rugby headgear and concussion prevention: misconceptions increase aggressive play. *Neurosurgical Focus*, 40(4), E12. https://doi.org/10.3171/2016.1.FOCUS15615

Doctoral Dissertation & Master Thesis Contributions

**Completed statistical analyses for entire dissertation or thesis

- 1. Doshi, M. (2022, University of Michigan). **Examining the effect of the 2016 election on depression in undocumented Latinx individuals. Doctoral (Ph.D.) dissertation. (<u>Currently Assistant Professor of Behavioral and Social Sciences @ Brown University</u>)
- 2. Weinstein, G. (2020, University of Florida). **Assessing socioeconomic predictors of dental knowledge. Master of Public Health (MPH) thesis. (Currently Associate Professor, In Residence @ University of Connecticut School of Dental Medicine)
- 3. Abu Khait, A. (2020, University of Connecticut). **Building a foundation for reminiscence research and practice in the Arabic-Jordanian culture. Doctoral (Ph.D.) dissertation. (<u>Currently Associate Professor of Psychological Health Nursing @ Hashemite University</u>)
- 4. Chauveron, L. (2019, Montclair State University). **Promoting community-based affirmation for diverse LGBTQ+ youth. Doctoral (Ph.D.) dissertation. (Currently Sr. Research Scientist @ Amazon)

Non-peer-reviewed Publications

 Menger, R., Menger, A. "Did Georgetown Students Really Vote...?" (2019, Apr 23). The Foundation for Economic Education. Op-ed. https://fee.org/articles/did-georgetown-students-really-overwhelmingly-vote-for-slavery-reparations/

Conferences/Educational Proceedings

Oral Presentation:

- 1. **Menger, A.** (2025, May). A joint longitudinal biomarker and mixture overall cure rate competing risks survival model with applications to prostate cancer screening. Oral Presentation, The 2025 Lifetime Data Science (LiDS) Conference: Brooklyn, NY.
- 2. **Menger, A.** (2024, Nov.). A mathematical approach to entrepreneurship. Invited Panelist Talk, New England Statistical Society (NESS) NextGen Data Science Day: Babson College, Wellesley, MA.
- 3. **Menger, A.**, Sheikh, M.T., Chen, M-H. (2024, May). Bayesian modeling of survival data in the presence of competing risks with cure fractions and masked causes. Invited Talk, 37th New England Statistics Symposium: University of Connecticut, Storrs, CT.
- 4. Abu Khait, A., **Menger, A.** (2024, Apr.). Demographic impact on reminiscence functions in a sample of Jordanian adults: implications for psychiatric nurses. Oral Presentation, 3rd International Scientific Nursing Conference (ISNC): Philadelphia University, Amman, Jordan.
- 5. **Menger, A.**, Sheikh, M.T., Chen, M-H. (2022, Nov.). Maximum likelihood approach for survival data in the presence of competing risks with cure fractions and masked causes. Invited Talk, University of Connecticut Department of Statistics Student Lecture Series: Storrs, CT.
- 6. **Menger, A.**, Sheikh, M.T., Gelfond, J., Ibrahim, J., Chen, M-H. (2021, Nov.). Bayesian joint modeling of longitudinal and competing risk survival data in the presence of cure fractions. Oral Presentation, Eastern Asia Chapter of the International Society for Bayesian Analysis (EAC-ISBA) Conference: Atlantic City, NJ.

- 7. **Menger, A.** (2020, Feb.). A flexible longitudinal study model for count data. Oral Presentation, University of Connecticut Department of Statistics Student Lecture Series: Storrs, CT.
- 8. **Menger, A.**, (2018, Jul.). Exploratory data analysis and regression. Invited Guest Lecture, Columbia University Summer Immersion Course on Big Data, Machine Learning, and Applied Analytics: New York, NY.
- 9. **Menger, A.** (2018, Mar.). Sharpening our statistical toolkit a rebirth of classical powerful techniques. Invited Talk, Columbia University: New York, NY.
- 10. Menger, R., **Menger, A.**, Nanda, A. (2014, Feb.). Misconceptions about rugby headgear and concussion prevention: a call for education, evaluation, and a cultural shift. Oral Presentation, Southern Neurosurgical Society (SNS), 65th Annual Meeting: San Juan, Puerto Rico.
- 11. Menger, R., Menger, A., Nanda, A. (2014, Jan.). Misconceptions about rugby headgear and concussion prevention: initial data. Oral Presentation, Louisiana Neurosurgical Society (LANS), 39th Annual Meeting: Baton Rouge, LA.

Poster Presentation:

*Current intern/student at the time of work

- 12. Sandilos, G., **Menger, A.**, Giugliano, D., Kwiatt, M., Gefen, R., Ives, E., Joneja, U., Miick, R., McClane, S.J. (2024, Jun.). Bayesian analysis of factors impacting concordance of MRI and histopathology in determining rectal tumor relationship to the anterior peritoneal reflection. The American Society of Colon and Rectal Surgeons (ASCRS) Annual Scientific Meeting: Baltimore, MD., Poster Presentation.
- 13. Moldovan*, T., Menger, A. (2022, Nov.). Moderated parallel mediation analysis of qualitative job insecurity scale (QUAL-JIS). New England Statistical Society (NESS) NextGen Data Science Day: Virtual, Virtual Poster Presentation.
- 14. Yu*, Y., McDermott, D., **Menger, A.** (2022, Nov.). Forecasting S&P500 daily close price intervals on the commodity futures trading platform Kalshi. New England Statistical Society (NESS) NextGen Data Science Day: Virtual, Virtual Poster Presentation (<u>awarded 2nd place overall</u>).
- 15. McClane, J., Menger, A., Welch, J., Lulla, R. (2022, May). Establishing metrics to assess perspectives of virtual learning in adolescents with cancer. The American Society of Pediatric Hematology/Oncology (ASPHO 2022) Annual Conference: Pittsburgh, PA., Poster Presentation.
- 16. Sandilos, G., Zhu, C., **Menger, A.**, Gefen, R., Kovacs, J., Giugliano, D., Kwiatt, M., McClane, S.J. (2022, May). Diagnostic accuracy of endoscopy in determining rectal tumor proximity to the peritoneal reflection. The American Society of Colon and Rectal Surgeons (ASCRS) Annual Scientific Meeting: Tampa, FL., Virtual Poster Presentation.
- 17. **Menger, A.**, Sheikh, M.T., Gelfond, J., Ibrahim, J., Chen, M-H. (2021, Nov.). Bayesian joint modeling of longitudinal and competing risk survival data in the presence of cure fractions. Eastern Asia Chapter of the International Society for Bayesian Analysis (EAC-ISBA) Conference: Atlantic City, NJ., Poster Presentation.
- 18. Menger, R., Shaw, T., Bunch, J., Barry, J., Marciano, G., **Menger, A.**, Martino, A., Lenke, L., Vitale, M. (2020, Apr.). Healthcare lobbying, political action committees, and spine surgery. American Association of Neurological Surgeons, Annual Meeting, Virtual Poster Presentation.
- 19. **Menger, A.**, Sellers, K. (2016, Apr.). An application of the Conway-Maxwell-Poisson distribution through a longitudinal study. Georgetown Undergraduate Research Conference (URC): Washington, DC., Poster Presentation.
- 20. Menger, R., Menger, A., Nanda, A. (2014, Oct.). Rugby headgear and concussion prevention; misconceptions increase aggressive play. Digital Poster, Congress of Neurological Surgeons: Boston, MA.

Supplemental Education:

Mar 2020

Invited Reviewer:

Lifetime Data Analysis Biometrical Journal Journal of Computational and Graphical Statistics Psychology Research and Behavior Management