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Ram C. Kafle, Ph.D.

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Department of Mathematics and Statistics
Sam Houston State University

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Education

Ph.D. in Statistics, August 2014
University of South Florida, Tampa, FL

Masters of Science, Statistics, May 2009
University of Akron, Akron, OH

Masters of Science, Mathematics, January 2001
Tribhuvan University, Kathmandu, Nepal

Bachelor of Science, December 1997
Tribhuvan University, Kathmandu, Nepal

Research Interests

Bayesian Statistical Analysis, Change-Point/Joinpoint Regression, Functional Regression Analysis, Statistical Methods in Epidemiology, Machine Learning.

Professional Experience

01/01/2021 – current Graduate Program Coordinator of Statistics, Sam Houston State University, TX

09/01/2020 – current Associate Professor of Statistics, Sam Houston State University, TX

09/01/2014 – 08/31/2020 Assistant Professor of Statistics, Sam Houston State University, TX

09/13/2013 – 05/03/2014 Instructor, University of South Florida, FL

12/22/2010 – 09/12/2013 Graduate Teaching Assistant, University of South Florida, FL

09/01/2010 – 12/01/2010 Data Analyst (Healthcare) Intern, Vastika Inc., Irving, TX

08/01/2008 – 06/30/2010 Graduate Teaching Assistant, Indiana University Purdue University at Indianapolis (IUPUI), IN

01/16/2007 – 05/11/2008 Graduate Teaching Assistant, The University of Akron, OH

08/21/2006 – 01/08/2007 Graduate Teaching Assistant, Marshall University, WV

02/15/2001 – 04/23/2006 Lecturer, Tribhuvan University, Nepal

02/01/1997 – 01/31/2001 Math/Science Teacher, Kanya Higher Secondary School, Nepal

Publications

Published:

- Kedar Nepal, **Ram C. Kafle**, "*Who can predict their performance more accurately? An investigation of undergraduate students' self-assessment behavior in mathematics courses*" Metacognition and Learning, https://doi.org/10.1007/s11409-024-09381-2.
- **Ram C. Kafle**, Doo Young Kim, Melinda M. Holt, "*Gender-specific trends in cigarette smoking and lung cancer incidence: A two-stage age-stratified Bayesian joinpoint model*", Cancer Epidemiology, Vol. 84, 2023.
- Keshav Pokhrel, Gokarna Raj Aryal, **Ram Chandra Kafle**, Bhikhari Tharu, N.etra Khanal, "*The McDonald-G Poisson Family of Distributions*", STATISTICA, Vol 82, No. 2, 2022.
- Bhikhari Tharu, Keshav P. Pokhrel, Gokarna R. Aryal, **Ram C. Kafle**, Netra Khanal, "*Study of age specific lung cancer mortality trends in the US using functional data analysis*", Communications for Statistical Applications and Methods , Vol. 28 (1), pp. 119-134, 2021.
- **Ram C. Kafle**, Doo Young Kim, Martin M. Malandro, Melinda Miller Holt, "*Modeling COVID-19 Positivity Rates and Hospitalizations in Texas*", Model Assisted Statistics and Applications (Special issue on Pandemics), Vol. 16 (1) , pp. 53-58, 2021.
- Ananda B. W. Manage, **Ram C. Kafle**, Danush K. Wijekularathna, "*Classification of All-Rounders in Limited-Over Cricket*", Journal of Sport Analytics, Vol. 6, No.4, PP. 295-306, 2020.
- **Ram C. Kafle**, Keshav Pokhrel, Netra Khanal, Chris P. Tsokos "*Differential Equation Model of Carbon Dioxide Emission Using Functional Linear Regression*", Journal of Applied Statistics, Vol. 46 (7), 2019.
- Amanda W. Scarbrough, Melinda M. Holt, Jack Hill, **Ram C. Kafle** "*Is there a Relationship between Income and Infectious Disease: Evidence from Cameron County*", International Journal of Community Well-Being, Vol. 2 (1), 2019.
- Amanda W. Scarbrough, Heranga Rathnasekara, Melinda M. Holt, Jack Hill, **Ram C. Kafle** "*Zika Virus and the Risk for Renter Households*", Disease, Vol. 6 (2), 2018.
- Kedar Nepal, Ramjee Sharma, **Ram C. Kafle** "*Why students cannot execute their own global plans*", American Mathematical Association of Two-Year Colleges (MathAMATYC), Vol. 9 (2), 2018.
- Hannah Johnson, **Ram C. Kafle**, Madhusudan Choudhary "*Cellular Localization of Gold and Mechanisms of Gold Resistance in Rhodobacter sphaeroides*", Advances in Microbiology, Vol. 7, 2017.
- Minh H. Pham, **Ram C. Kafle** "*Competing Risks Analysis of African American Breast Cancer Patients*", Advances in Breast Cancer Research, Vol. 6 (1), 2017 .
- Matthew E. Verbyla, Erin M. Symonds, **Ram C. Kafle**, Maryann R. Cairns, Mercedes Iriarte, Alvaro Mercado, Olver Coronado, Mya Breitbart, Carmen Ledo, James R. Mihelcic "*Managing microbial risks from indirect wastewater reuse for irrigation in urbanizing watersheds*", Environmental Science & Technology, Vol. 50 (13), 2016.

- Bhikhari P. Tharu, **Ram C. Kafle**, Chris P. Tsokos " *Bayesian Age-Period-Cohort Model of Lung Cancer Mortality*", Epidemiology, Biostatistics and Public Health, Vol. 12 (3), 2015.
- E.M. Symonds, M.E. Verbyla, J.O. Lukasik, **R.C. Kafle**, M. Breitbart, J.R. Mihelcic "*A case study of enteric virus removal and insights into the associated risk of water reuse for two waste water treatment pond system in Bolivia* ", Water Research, Vol. 65, 2014.
- **Ram C. Kafle**, Netra Khanal, Chris P. Tsokos "*Bayesian Age-stratified Joinpoint Regression Model: An application to Lung and Brain Cancer Mortality*", Journal of Applied Statistics, Vol. 41 (12), 2014.
- **Ram C. Kafle**, Netra Khanal, Chris P. Tsokos "*Bayesian Joinpoint Regression Model for Childhood Brain Cancer Mortality*", Journal of Modern Applied Statistical Methods, Vol. 12(2), 2013.

Research Presentation

05/2023 Presented paper "*A two-stage Bayesian joinpoint regression model and its application in epidemiological studies*", in **Second International Conference on Applications of Mathematics to Nonlinear Sciences (AMNS-2023)**, May 25-28, Pokhara, Nepal.

12/2022 Wrokshop Presentation"*Generalized Linear Models using R*", in **R-Workshop organized by Nepal Statistical Society and Association of Nepalese Mathematicians in America**, 11/25/2022-12/30/2022.

08/2022 Presented paper **(Invited)** "*Study on smoking rates and lung cancer incidence: A two-stage Bayesian joinpoint regression model*", in **Stat-Chautari Talk Series**, August 13, 2022.

09/2021 Wrokshop Presentation "*Machine Learning Techniques using R*", in **R-Workshop organized by Nepal Statistical Society and Association of Nepalese Mathematicians in America**, 09/27/2021.

11/2019 Presented paper "*Statistical Analysis of Trends using Joinpoint and Functional Regression Approaches*", in **Weekley Seminar Series, Department of Mathematics and Statistics, SHSU**, November 20, 2019, Huntsville, TX.

06/2019 Presented paper "*A Population-Based Study on the Effect of Smoking on Age-adjusted Lung Cancer Incidence using Bayesian Approach*", in **Second International Conference on Applications of Mathematics to Nonlinear Sciences (AMNS-2019)**, June 27, 2019, Pokhara, Nepal.

06/2019 Presented paper **(Invited)**"*Managing Microbial Risks from Indirect Wastewater Reuse for Irrigation in Urbanizing Watersheds*", in **Central Department of Statistics, Tribhuvan University**, June 24, 2019, Kathmandu, Nepal.

08/2018 Presented paper "*Bayesian Joinpoint Regression Model to Study the Effect of Smoking on Lung Cancer Incidence*", in **Joint Statistical Meeting, 2018**, July 29- August 03, Vancouver, CA.

05/2018 Presented paper **(Invited)**" *Differential Equation Model of Carbon Dioxide Emission Using Functional Linear Regression*", in **Frontier of Statistics-IFNA Workshop, 2018**, May 11- May 13, Tampa, FL.

08/2017 Presented paper "*Bayesian Approach for Managing Microbial Risks from Wastewater Reuse for Irrigation*", in **Joint Statistical Meeting, 2017**, July 28 - August 03, Atlanta, GA.

08/2016 Presented paper "*Estimating Rate of Change of Carbon Dioxide Emission using Functional Approach*", in **Joint Statistical Meeting, 2016**, July 30 - August 04, Chicago, IL.

04/2016 Presented paper **(Invited)** "*Bayesian Quantitative Microbial Risk Assessment Model for Assessing Wastewater Microbial Risks*", in **Frontiers of Statistics-Workshop on Analytics and Big Data Across Disiplines, 2016**, April 1 - 2, University of South Florida, Tampa, FL.

08/2015 Presented paper "*Parametric Mixture Models for Competing Risks Analysis of African American Breast Cancer Patients*", in **Joint Statistical Meeting, 2015**, August 8 - August 13, Seattle, WA.

05/2015 Presented paper "*Functional Regression on Estimating the Rate of Change of Temporal Trends* ", in **Seventh International Conference on Dynamic Systems and Applications and Fifth International Conference on Neural, Parallel, and Scientific Computations 2015**, May 27- May 30, Atlanta, GA.

04/2015 Presented paper **(Invited)** "*Bayesian Age-stratified Joinpoint Regression Model and Its Application in Public Health Research*", in **Conference of Texas Statisticians 2015**, April 10- April 11, Austin, TX.

01/2015 Presented paper "*Modeling Carbon Dioxide Emission Data using Functional Data Analysis Approach*", in **Joint Mathematics Meeting 2015**, January 10- January 13, San Antonio, TX.

02/2014 Presented paper "*A Study of the Rate of Change of the Major Sources of Emission of Carbon Dioxide in the Atmosphere*", in **ASA Florida Chapter Meeting 2014**, Feburary 5- Feburary 6, Gainesville, FL.

01/2014 Presented paper "*Bayesian Age-stratified Joinpoint Regression Model: An Application to Lung and Brain Cancer Mortality*", in **Joint Mathematics Meeting 2014**, January 15- January 18, Baltimore, MD.

08/2013 Presented paper "*Bayesian Approach to Age-Adjusted Joinpoint Regression Model*", in **Joint Statistical Meeting**, August 3-August 8, Montreal, Canada.

07/2012 Presented paper "*Bayesian Approach of the Joinpoint Regression Model for Brain Cancer Data*", in **Joint Statistical Meeting**, July 27-August 2, San Diego, California.

06/2012 Presented paper "*Bayesian Estimate of Annual Percentage Change in Mortality Trend for Brain Cancer Data*", in the **International Federation of Nonlinear**

Analyst (IFNA) World Congress 2012, June 25- July 01, Athens, Greece.

05/2011 Presented paper "*Theoritical Semi-Parametric Survival Analysis Model*" in **Sixth International Conference on Dynamic Systems and Applications**, May 25-28 at Morehouse College, Atlanta.

05/2010 Presented a talk on "*Beauty is in the Eye of Smoothers: Smoothing Spline*" in **Biostatistics Seminar Series**, March 25, 2010 at IUPUI, Indianapolis, IN.

12/2009 Presented a talk on "*Variable Selection using Bayesian Approach*" in **Weekly Statistics Seminar**, December 05, 2009 at IUPUI, Indianapolis, IN.

Conference Organized

06/2019 Worked as a member of Organizing Commiittee for "*Second International Conference on Applications of Mathematics to Nonlinear Sciences* **(AMNS-2019)**, June 26-29, 2019, Pokhara, Nepal.

05/2018 Worked as a member of Organizing Commiittee for "*Workshop on Collaborative Research in Mathematical Sciences* **(ANMA Workshop-2018)**, May 25-27, 2018, Mercer University, Macon, GA.

05/2016 Worked as a member of Organizing Commiittee for "*First International Conference on Applications of Mathematics to Nonlinear Sciences* **(AMNS-2016)**, May 26-29, 2016, Kathmandu, Nepal.

05/2015 Organized and chaired a session "*Workshop on Bayesian Decision Analysis in Health Sciences* ", **Seventh International Conference on Dynamic Systems and Applications and Fifth International Conference on Neural, Parallel, and Scientific Computations**, May 27-30, 2015, Atlanta, GA.

05/2015 Co-chaired a session "*Workshop on Functional and Longitudinal Data Analysis*", **Seventh International Conference on Dynamic Systems and Applications and Fifth International Conference on Neural, Parallel, and Scientific Computations**, May 27-30, 2015, Atlanta, GA.

06/2012 Organized and chaired a session "*Bayesian Analysis and Modeling*", **International Federation of Nonlinear Analyst (IFNA) World Congress 2012**, June 25- July 01, Athens, Greece.

Conference Participated (No Presentation)

04/2019 **Conference of Texas Statisticians (COTS-2019)** on April 05-06, 2019, Lamar University, Beaumont , TX.

01/2019 **Joint Math Meeting 2019**, January 15-18, 2019, Baltimore, MD.

05/2018 **Workshop on Collaborative Research in Mathematical Sciences**, May 25-27, 2018, Mercer University, Macon, GA.

12/2017 **The 2017 International Workshop on Objective Bayes Methodology**, December 10-13, 2017, University of Austin, TX.

04/2017 **Conference on Applied Statistics in Agriculture 2017**, April 23-25, 2017, Kansas State University, Kansas City, KS.

03/2017 **Conference of Texas Statisticians (COTS-2017)**, March 24-25, 2017, Southern Methodist University, Dallas, TX.

01/2017 **Joint Math Meeting**, January 04- 05, 2017,Atlanta, GA.

04/2016 **Conference of Texas Statisticians (COTS-2016)**, April 08-09, 2016, Trinity University, San Antonio, TX.

08/2011 **Joint Statistical Meeting**, July 30-August 4, 2011, Miami beach, FL.

02/2011 **Annual Meeting of the Florida Chapter of American Statistical Association**, February 04-05, 2011, Moffitt Cancer Center in Tampa, FL.

04/2010 **Statistics Day**, April 29, 2010, at IUPUI, Indianapolis, IN.

10/2008 **Annual Conference of The MidWest SAS Users Group**, October 12 - 14, 2008, Indianapolis, IN.

01/2007 **Annual Conference of American Mathematical Society**, January 05 - 07, 2007, New Orleans, LA.

10/2006 **2nd Annual Conference of Appalachian Association of Mathematics Teacher Educators**, October 27-28, 2006, Morehead State University, KY.

Grants Submitted

11/2022 LSAMP Grant: The Structure of the Louis Stokes New STEM Pathways Implementation-Only Alliance (Submitted to NSF as a Resource Person for Statistical Consulting Center on 11/18/2022) PI: Dr. Michael Stephenson (Not funded)

09/2022 Processed foods, whole foods, and exogenous digestive enzymes: Effects on the fecal microbiome, GI function, and nutrient status (Co-PI) (Submitted to USDA on 09/06/2022, PI: Dr.Owen Kelly) (Not funded)

10/2016 Faculty Research Grant (Not funded)
Title: Statistical Estimation and Prediction of Lung Cancer Rates (submitted with Dr. Melinda Holt on 10/10/2016).

11/2015 National Science Foundation Grant- Ecology and Evolution of Infectious Diseases (EEID) (Submitted on 11/17/2015; Not funded)
Title: Minimizing health burdens from de facto wastewater reuse using Bayesian networks for microbial risk assessment. (Submitted being Co-PI with Dr. Mya Breitbart from University of South Florida (PI) and Dr. Maryann R. Cairns from Michigan Technological University (Co-PI).

10/2015 Faculty Research Grant (Not funded)
Title: Statistical Analysis of Carbon Dioxide Emission Trend (submitted with Dr. Ferry Butar on 10/12/2015).

10/2015 Faculty Research Grant (Not funded)
Title: Small Area Estimators: Applications to Cancer Mortality in Texas (submitted with Dr. Ferry Butar on 10/12/2015).

10/2014	Faculty Research Grant (Not funded) Title: Study of Rate of Change of Carbon Dioxide Emission (submitted on 10/12/2014).
01/2013	University of South Florida Graduate Student Research Challange Grant (01/2013; $5000 funded).

Graduate Student Supervised

2022/2023	Madan Neupane, "*Statitical Analysis and Prediction of Daily Stock Price using Machine Learning Techniques* " (August 2022- April 2023)
2021/2022	Ram Dhungana, "*Statitical Analysis and Prediction of Stock Index using Machine Learning Techniques* " (August 2021- April 2022)
2020/2022	Vu Le, "*Predictions using Machine Learning Techniques in Finance and Economy* " (August 2020- April 2022).
2019/2020	Xuelian Gao "*Application of Zero Inflated Poission Regression Model for Repeated Measure in Glass Fragment Analysis*" (August 2019- April 2020).
2018/2019	Farzana Noorzahan "*Comparisions of Nitrogen Dioxide Emission Trends in Different Cities in Texas using Functional Regression Approach*" (January 2019- December 2019).
2018/2019	Moruf Disu "*Study of The Efficacy of Smoking Cessation Treatment in Cocaine /Meth Dependent Patients using Bayesian Generalized Linear Mixed Effect Model*" (August 2018-April 2019).
2018/2019	Richard Ekem "*Functional Linear Regression Approach for Studying the Female Lung Cancer Incidence Trends in the United States*" (August 2018- April 2019) **(Second Place Poster Award - COTS 2019)**.
2016/2017	Anita Sharma Bhandari "*Longitudinal Study of The Efficacy of Smoking Cessation Treatment in Cocaine/Meth Dependent Patients*" (August 2016- April 2017).
2015/2016	Dilini Gamage "*Assessing the Effectiveness of Smoking Cessation Treatments using Survival Analysis Models* " (August 2015- April 2016) **(Best Biostatistics Poster Award- COTS 2016)**.

Undergraduate Student Supervised

Spring 2022	Prabesh Koirala , " *Statistical Modeling of Inflaction and Currency Denominations using Time Series Approach* "(Worked on this project as an Independent Study.)
2018/2019	Curtis Roscoe "*Is There Any Effect of Age on a Measure of Problem-Solving?*" (With Dr. Justin Allen from Psychology Department, SHSU).
Fall 2018	Sophie Warren "*Statistical Analysis to Study the Effect of Vitamin B-12 on the Growth of Brewer's Yeast*."

Spring 2018	My Pham "*Statistical Analysis of Lung Cancer Incidence*."
2016/2017	Michael Penrod "*Trend Analysis Aerosol in Himalayan Region using Time Series Approach*" (Presented Poster in Fifth Annual Texas Stem Conference-2017 and **First Place Poster Award)**.
2015/2016	Merary Bautista "*Bees species richness and abundance at a landscape scale*", **(College of Sciences Undergraduate Research Award - 2016)**.
2015/2016	Kenneth Nobleza "*Trend Analysis of Aerosol Particles in Himalayan Region*."
2015/2016	Madeline Byrd "*A Survival Model for Analyzing the Number of Runs by a Batsman in Cricket*" (With Dr. Ananda Manage).

Graduate Courses Developed (SHSU)

–Introduction to Survival Analysis (STAT 6377)

–Longitudinal Data Analysis (STAT 6378)

Graduate Courses Taught (SHSU)

–Design & Analysis of Experiments (STAT 5333)

–Thry & Appltn Of Probability (STAT 5361)

–Thry & Appltn Of Statistics (STAT 5362)

–Regression Modeling & Analysis (STAT 5368)

–Statistical Methods for Agriculture (STAT 5375)

–Biostatistics (STAT 6375)

–Introduction to Survival Analysis (STAT 6377)

–Longitudinal Data Analysis (STAT 6378)

–Stat Mthd For Decision Making (STAT 7365)

Undergraduate Courses Taught (SHSU)

–Elementary Statistics (MATH/STAT 1369)

–Statistical Methods in Practice (MATH/STAT 3379)

–Stat Desgn & Anal of Experimts (STAT 3380)

–Thry & Appl of Prob & Stat I (MATH/STAT 4371)

–Thry & Appl of Prob & Stat II (MATH/STAT 4372)

–Regression Modeling & Analysis (STAT 4374)

–Introduction to Statistical Learning (STAT 4390)

University and Departmental Services

01/2021- current	**Statistics Graduate Program Committee (SHSU)** -Graduate Program Coordinator
Spring 2022	**FES (Faculty Evaluation System) Committee (SHSU)** -Member of Faculty Evaluation System Committee for academic year 2021
08/2016 –12/2020	**Course Cooridnator (SHSU)** -Course Coordinator of Elementary Statistics (MATH/STAT 1369)
03/2017 –12/2020	**Statistics Graduate Program Committee (SHSU)** -Member of Statistics Graduate Committee
08/2018 –05/2020	**Honors Committee (SHSU)** -Member of Honors Committee (Department of Mathematics and Statistics)
Spring 2019	**Search Committee (SHSU)** -Member of Serach Committee for Instructor (Spring 2019)
Spring 2019	**FES (Faculty Evaluation System) Committee (SHSU)** -Member of Faculty Evaluation System Committee for academic year 2018
Spring 2019	**Textbook Selection Committee (SHSU)** -Member of textbook selection committee for MATH/STAT 3379
Spring 2018	**FES (Faculty Evaluation System) Committee (SHSU)** -Member of Faculty Evaluation System Committee for academic year 2016
Spring 2018	**Search Committee (SHSU)** -Member of Serach Committee for Tenure Track Assistant Professor of Statistics for Fall 2018
Spring 2018	**Textbook Selection Committee (SHSU)** -Chair of textbook selection committee for MATH/STAT 1369 (Spring 2018)
Fall 2016	**Graduate Program Review Committee (SHSU)** -Member of Graduate Program Review Committee (Fall 2016)
Spring 2016	**Textbook Selection Committee (SHSU)** -Member of textbook selection committee for MATH/STAT 3379 (Spring 2016)
01/2011 –07/2014	**Urban Scholar Outreach Program (USOP) (USF)** Volunteered as mathematics tutor to high school students, mostly African American and Hispanic students at the University of South Florida.

Memberships

12/2022 –present	**President**, Association of Nepalese Mathematicians in America (ANMA)
01/2012 –present	**Life Member**, Association of Nepalese Mathematicians in America (ANMA)
01/2019 –12/2022	**Vice President**, Association of Nepalese Mathematicians in America (ANMA)
01/2008 –08/2020	**Member**, American Statistical Association (ASA)

10/2014 –12/2018 **Board of Director**, International Federation of Nonlinear Analysts (IFNA)

01/2017 –12/2018 **Treasure**, Association of Nepalese Mathematicians in America (ANMA)

11/2014 –12/2017 **Faculty Advisor**, Nepalese Student Association at SHSU

04/2013 –03/2015 **Member**, The Mathematics Honor Society, Pi Mu Epsilon

03/2013 –02/2015 **Member**, The Honor Society of Phi Kappa Phi

06/2013 –06/2014 **President**, Statistic Club, University of South Florida

05/2012 –06/2013 **Vice President**, Nepalese Students Association (NeSA), University of South Florida

06/2012 –05/2013 **Vice President**, Statistic Club, University of South Florida

Awards and Honors

07/2013 "*M.V. Johns Jr. Scholarship for Graduate Study in Statistics*" awarded by Department of Mathematics and Statistics, USF.

07/2013 "*A. N. V. Rao Scholarship Award* " awarded by Department of Mathematics and Statistics, USF.

04/2013 "*Tharp Scholarship Award* " awarded by Department of Mathematics and Statistics, USF.

05/2012 "*Tharp Scholarship Award* " awarded by Department of Mathematics and Statistics, USF.

Editorial Baord

04/2015 –04/2019 **Editorial Board**, Jacobs Journal of Hydrology.

05/2012 –12/2018 **Managing Co-Editor**, International Journal of Environmental Sciences (IJES).

02/2015 –01/2018 **Editorial Board**, Peertechz Journal of Health Community and Family Medicine.

Journal Referee

Statistics in Medicine

Journal of Biopharmaceutical Statistics

Journal of Applied Statistics

Breast Cancer: Basic and Clinical Research

Scientific Research Publishing (Open Journal of Statistics)

Jacobs Journal of Hydrology

REVSTAT Statistical Journal

Computing Skills

R, SAS, WinBUGS/OpenBUGS, SPSS, Minitab, C++