



DEPARTMENT OF BIostatISTICS

Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India.

Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS
Professor & Head

Certificate

This is to certify that this dissertation entitled "**Review on Classification and Regression Tree (CART) Using Family Violence Data**" of the candidate Ms. **Treesa Jacob** for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of **Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS.**, Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS,

Professor and Head,

Department of Biostatistics,

Christian Medical College,

Vellore, India.



September 05, 2018



PSG Institute of Medical Sciences & Research

Post Box No. 1674, Peelamedu, Coimbatore 641004, INDIA
Phone : 91 422 - 2598822, 2570170 • Fax : 91 422 - 2594400
E-mail : psgmedschool@gmail.com Website : www.psgimsr.ac.in

CERTIFICATE

This is to certify that the project work entitled "**FACTORS ASSOCIATED WITH TIMELY INITIATION OF BREASTFEEDING A HOSPITAL BASED STUDY**" is a record of original work done by **DONA MARIA PHILIP** under my supervision and guidance in partial fulfilment of the requirements for the degree of **Masters of Science in Biostatistics** of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associate ship or Fellowship or other similar title to any other candidate of this or any other university.

Dr. Anil C Mathew

Professor of Biostatistics

Department of Community Medicine

PSG Institute of Medical Sciences & Research

Coimbatore, Tamil Nadu

Forwarded by:

Dr. K K Jose

Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala

Head of the Department of Biostatistics

St. Thomas College, Pala, Kerala



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Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India.

Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS
Professor & Head

Certificate

This is to certify that this dissertation entitled "**Modelling of Rates and Proportions using Beta Regression**" of the candidate Ms. Jisharaj V R for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of **Dr. L. Jeyaseelan M.Sc., Ph.D., FRSS., FSMS**, Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

Dr. L. Jeyaseelan M.Sc., Ph.D., FRSS., FSMS,
Professor and Head,
Department of Biostatistics,
Christian Medical College,
Vellore, India.



September 01, 2018

REGIONAL CANCER CENTRE
P.O. BOX No 2417
MEDICAL COLLEGE CAMPUS
THIRUVANANTHAPURAM - 695 011
KERALA STATE



Fax : +91 471 2447454
Phone : +91 471 2442541
Website : www.rcctvm.org
E-mail: webmaster @ rcctvm.org

CERTIFICATE

This is to certify that the project entitled "ESTIMATION OF CANCER SURVIVAL PROBABILITY USING WEIGHTED KAPLAN-MEIER METHOD: A COMPARATIVE STUDY" is a record of original work done by NIMI MOHAN under my supervision in partial fulfilment of the requirements of the degree of Master of Science in Biostatistics of Mahatma Gandhi University, Kottayam. I further certify that the project work has not been previously formed the basis for the award of any other Degree or Diploma or other similar title to any candidate of this or any other university.

Dr. Jagathnath Krishna K M

Assistant Professor in Biostatistics
Division of Cancer Epidemiology & Biostatistics
Regional Cancer Centre, Thiruvananthapuram



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala



DEPARTMENT OF BIostatISTICS

Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India

Dr. L. JEYASEELAN, M.Sc. Ph.D. FRSS. FSMS
Professor & Head

Certificate

This is to certify that this dissertation entitled "**Multiple Imputation for Missing data by applying Regression Method**" of the candidate **Ms. ARYA DEVI .K.S,** for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of **Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS.,** Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS.,
Professor and Head,
Department of Biostatistics,
Christian Medical College,
Vellore, India.



September 05, 2018



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam, Dr. Kerala



DEPARTMENT OF BIOSTATISTICS

Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India.

Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS
Professor & Head

Certificate

This is to certify that this dissertation entitled "Review and Use of Ridge Regression in Medical Research" of the candidate Ms. Brilly M. Rose for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS., Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

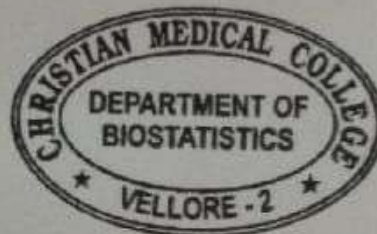
Dr. L. Jeyaseelan M.Sc., Ph.D., FRSS., FSMS,

Professor and Head,

Department of Biostatistics,

Christian Medical College,

Vellore, India.



September 05, 2018

Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala

REGIONAL CANCER CENTRE
P.O. BOX No.2417
MEDICAL COLLEGE CAMPUS
THIRUVANANTHAPURAM - 695011
KERALA STATE



Fax : +91 471 2447454
Phone: +91 471 2442541
Website : www.rcctvm.org
E-mail : webmaster@rcctvm.gov.in

CERTIFICATE

This is to certify that the project entitled "TIME TREND ANALYSIS OF LUNG CANCER WORLDWIDE USING AGE PERIOD COHORT MODEL" is a record of original work done by ANJANA JOSE under my supervision in partial fulfilment of the requirements of the degree of Master of Science in Biostatistics of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associateship or Fellowship or other similar title to any candidate of this or any other university.

Dr. Preethi Sara George

Associate Professor in Biostatistics
Division of Cancer Epidemiology & Biostatistics
Regional Cancer Centre, Thiruvananthapuram



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala



ST. JOHN'S MEDICAL COLLEGE

(A Unit of CBCI Society for Medical Education)
Koramangala, BENGALURU - 560 034.

CERTIFICATE

This is to certify that the project entitled "Application of Piecewise Regression in the Estimation of Breakpoint for Amino Acid Oxidation in Children" is a record of original work done by Mr Anoop Jose, Department of Biostatistics, St Thomas College, Pala during the year 2016-2018 towards partial fulfilment of requirements for the award of the Degree of Master of Science in Biostatistics from Mahatma Gandhi University, Kottayam, Kerala. He has done the work in the Department of Biostatistics, St John's Medical College, Bangalore from 18th July 2018 to 17th September 2018, under my guidance. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associate ship or Fellowship or other similar title to any candidate of this or any other university.

Thanking You,

Sincerely,

Dr. TINKU THOMAS

Professor & Head

Dept. of Biostatistics

SJMC

Dr. TINKU THOMAS
Professor & Head
Department of Biostatistics
St. John's Medical College
Bangalore - 560 034



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala



DEPARTMENT OF BIOSTATISTICS

Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India

Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS.
Professor & Head

CERTIFICATE

This is to certify that this dissertation entitled "**Determination of Retaining Factors in Exploratory Factor Analysis using conventional and Parallel Analysis Methods**" of the candidate **Ms. Prema S** for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of the Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of **Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS.**, Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS.,
Professor and Head,
Department of Biostatistics,
Christian Medical College,
Vellore, India.



September 08, 2018

REGIONAL CANCER CENTRE
P.O. BOX No.2417
MEDICAL COLLEGE CAMPUS
THIRUVANANTHAPURAM - 695011
KERALA STATE



Fax : +91 471 2447454
Phone: +91 471 2442541
Website : www.rcctvm.org
E-mail : webmaster@rcctvm.gov.in

CERTIFICATE

This is to certify that the project entitled "TIME TREND ANALYSIS OF OESOPHAGUS CANCER WORLDWIDE USING JOINPOINT REGRESSION MODEL" is a record of original work done by MANJU L under my supervision in partial fulfilment of the requirements of the degree of Master of Science in Biostatistics of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associateship or Fellowship or other similar title to any candidate of this or any other university.

Dr. Preethi Sara George

Associate Professor in Biostatistics
Division of Cancer Epidemiology & Biostatistics
Regional Cancer Centre, Thiruvananthapuram



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala



DEPARTMENT OF BIOSTATISTICS

Biostatistics Resource and Training Centre
Christian Medical College, Vellore - 632 002, India.

Dr. L. JEYASEELAN, M.Sc., Ph.D., FRSS., FSMS
Professor & Head

Certificate

This is to certify that this dissertation entitled "**Time dependent covariates in Survival analysis**" of the candidate **Ms. Aayisha Ali A** for the degree of Master of Science in Biostatistics submitted to the Faculty of Science of Mahatma Gandhi University, Kottayam, is a record of her research work done under the guidance of **Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS.,** Professor and Head, Department of Biostatistics, Christian Medical College, Vellore.

Dr. L. Jeyaseelan, M.Sc., Ph.D., FRSS., FSMS,
Professor and Head,
Department of Biostatistics,
Christian Medical College,
Vellore, India.



September 05, 2018



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala



PSG Institute of Medical Sciences & Research

Post Box No. 1674, Peelamedu, Coimbatore 641 004, INDIA

Phone : 91 422 - 2598822, 2570170 • Fax: 91 422 - 2594400

E-mail : psgmedschool@gmail.com Website : www.psgimsr.ac.in

CERTIFICATE

This is to certify that the project work entitled "THE EFFECT OF MODE OF DELIVERY ON BREASTFEEDING OUTCOMES: A HOSPITAL BASED STUDY" is a record of original work done by **DHANYA C** under my supervision and guidance in partial fulfilment of the requirements for the degree of **Masters of Science in Biostatistics** of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associate ship or Fellowship or other similar title to any other candidate of this or any other university.

Dr. Anil C Mathew

Professor of Biostatistics

Department of Community Medicine

PSG Institute of Medical Sciences & Research

Coimbatore, Tamil Nadu

Forwarded by:

Dr. K K Jose

Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala

Head of the Department of Biostatistics

St. Thomas College, Pala, Kerala

REGIONAL CANCER CENTRE

P.O. BOX No. 2417
MEDICAL COLLEGE CAMPUS
THIRUVANANTHAPURAM - 695 011
KERALA STATE



Fax : +91 471 2447454
Phone : +91 471 2442541
Website : www.rccvm.org
E-mail: webmaster @ rccvm.org

CERTIFICATE

This is to certify that the project entitled "POTENTIAL YEARS OF LIFE LOST DUE TO CANCER BY GENDER IN THIRUVANANTHAPURAM" is a record of original work done by SOUMYA THOMAS under my supervision in partial fulfilment of the requirements of the degree of Master of Science in Biostatistics of Mahatma Gandhi University, Kottayam. I further certify that the project work has not been previously formed the basis for the award of any other Degree or Diploma or other similar title to any candidate of this or any other university.

Dr. Jagathnath Krishna K.M.

Assistant Professor in Biostatistics
Division of Cancer Epidemiology & Biostatistics
Regional Cancer Centre, Thiruvananthapuram



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala

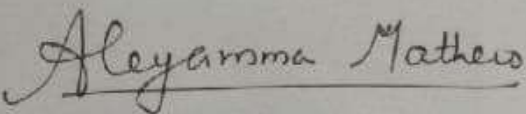
REGIONAL CANCER CENTRE
P.O. BOX No.2417
MEDICAL COLLEGE CAMPUS
THIRUVANANTHAPURAM - 695011
KERALA STATE



Fax : +91 471 2447454
Phone: +91 471 2442541
Website : www.rcctvm.org
E-mail : webmaster@rcctvm.gov.in

CERTIFICATE

This is to certify that the project entitled "TIME TREND ANALYSIS OF CORPUS UTERI CANCER WORLDWIDE USING AUTOREGRESSIVE INTEGRATED MOVING AVERAGE MODEL" is a record of original work done by KANIKA JOSE under my supervision in partial fulfilment of the requirements of the degree of Master of Science in Biostatistics of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associateship or Fellowship or other similar title to any candidate of this or any other university.


Dr. Aleyamma Mathew

Professor & Head
Division of Cancer Epidemiology & Biostatistics





PSG Institute of Medical Sciences & Research

Post Box No. 1674, Peelamedu, Coimbatore 641004, INDIA
Phone : 91 422 - 2598822, 2570170 • Fax: 91 422 - 2594400
E-mail : psgmedschool@gmail.com Website : www.psgimsr.ac.in

CERTIFICATE

This is to certify that the project work entitled "**SOCIO-DEMOGRAPHIC AND CLINICAL CORRELATES OF EXCLUSIVE BREASTFEEDING UP TO SIX MONTHS OF AGE**" is a record of original work done by **JIBIN K BENNY** under my supervision and guidance in partial fulfilment of the requirements for the degree of **Masters of Science in Biostatistics** of Mahatma Gandhi University, Kottayam. I further certify that the project work has not previously formed the basis for the award of any other Degree or Diploma or Associate ship or Fellowship or other similar title to any other candidate of this or any other university.

Dr. Anil C Mathew

Professor of Biostatistics

Department of Community Medicine

PSG Institute of Medical Sciences & Research

Coimbatore, Tamil Nadu



Head, Dept. of Biostatistics
St. Thomas College, Pala
Kottayam Dt., Kerala

Forwarded by:

Dr. K K Jose

Head of the Department of Biostatistics

St. Thomas College, Pala, Kerala