

## About the Authors

**Adri Ahmed** holds a PhD in Industrial Engineering from the Laboratory of Mechanical Productivity and Industrial Engineering, Computer-Integrated Manufacturing (LMPGI) at the High School of Technology and the Higher National School of Electricity and Mechanical, University Hassan II of Casablanca. He is also an Engineer in Design and Mechanical Manufacturing from the Engineers Mohammadia School in Rabat. Currently, he serves as a Professor of Higher Education at the High School of Technology, University Hassan II in Casablanca, and is a member of the Mechanical, Manufacturing, and Industrial Engineering Research Laboratory (LMPGI).

**Bandyopadhyay Arnab** is working as an Assistant Professor of the Department of Basic Science and Humanities (Mathematics section), Asansol Engineering College, Asansol-713305, West Bengal, India. He has more than fifteen years of teaching experience as an Assistant Professor in Mathematics. He has obtained his MSc and PhD in Applied Mathematics from the Indian Institute of Technology (Indian School of Mines) Dhanbad. His research field is Statistical Sample Surveys, Data Analysis and Statistical Inference. Dr. Bandyopadhyay is also a member of editorial board/ reviewers for many international journals. He has published 40 papers in international journals of repute and 4 international books on sampling theory.

**Baral Manish Mohan** is working as an Assistant Professor in the Department of Operations, GITAM School of Business, GITAM (Deemed to be University), Visakhapatnam, India. He is an engineering graduate from KIIT University, Bhubaneswar, Odisha, MBA in International Business from GITAM University, Visakhapatnam and pursued his PhD in Management from Birla Institute of Technology Mesra, Ranchi. He has published in International Journal of Logistics Management, Benchmarking: An International Journal, Management Decision, and Decision and other reputed journals and several Scopus indexed book chapters. His research areas include information technology, cloud computing, supply chain management, artificial intelligence, operations research, and quality management.

**Ben Ali Mohamed** holds a PhD in Industrial Engineering and is an Associate Researcher at the Mechanical Productivity and Industrial Engineering, Computer-Integrated Manufacturing Laboratory of the High School of Technology, University Hassan II of Casablanca. Formerly, he served as a Professor in the Bachelor's program in 'Quality Management and Productivity' at the Faculty of Science and Techniques of Tangier. His research interests encompass modelling, entrepreneurship, productivity,

quality management, safety and environmental practices, and logistics. Currently, he is a Professor at the High School of Technology, University Hassan II in Casablanca.

**Beresovsky Vladislav** is a Research Mathematical Statistician working for the Office of Survey Methods Research at the U.S. Bureau of Labor Statistics. Prior to that, he worked as a Mathematical Statistician at the Centers for Disease Control, National Center for Health Statistics. His research is focused on estimation from data collected by surveys with complex design, adjustment for survey nonresponse, estimation from nonprobability data sources and small area estimation. His work has been presented at multiple conferences and published in journals and conference proceedings.

**Bhattacharjee Subarna** received her MSc and PhD degree in Mathematics from Indian Institute of Technology, Kharagpur, India. Presently, she is a faculty member in the Department of Mathematics, Ravenshaw University, Cuttack, India. Her research areas include stochastic orders and aging classes.

**Chittipaka Venkataiah** is working as Associate Professor (Operations Management) at Indira Gandhi National Open University, Delhi, India. He has worked as a professor in the area of Operations, Quality and Project Management in GITAM Institute of Management, GITAM (Deemed to be University), Visakhapatnam, Andhra Pradesh, India for 11 years. He is an engineering graduate and completed MBA from National Institute of Technology, Warangal and obtained his doctorate from the Department of Business Management, Osmania University and qualified in UGC-NET conducted by University Grants Commission, New Delhi. His area of interest includes operations, quality, marketing research, logistics, supply chain management and project management.

**Das Pitambar** is working as an Assistant Professor of the Department of Mathematics, Netaji Nagar Day College, Kolkata-700092, West Bengal, India. He has more than thirteen years of teaching experience as Assistant Professor in Mathematics. He has obtained his MSc, MPhil and PhD in Applied Mathematics from the Indian Institute of Technology (Indian School of Mines), Dhanbad. His research field is Statistical Sample Surveys and Statistical Inference. He has published 6 papers on sampling theory in international journals.

**Gershunskaya Julie** is a mathematical statistician with the Statistical Methods Staff of the Office of Employment and Unemployment Statistics at the U.S. Bureau of Labor Statistics. Her main areas of interest include statistical data integration, small area estimation, and treatment of influential observations, with application to the U.S. Current Employment Statistics Program.

**Giri Rajib Lochan** completed his MSc in Mathematics from Utkal University, Bhubaneswar. He did MPhil and PhD in Mathematics from Ravenshaw University, Cuttack, Odisha, India. Presently, he is working as an Assistant Professor

in Mathematics at the Sri Sri University, Cuttack. His research interests include reliability theory.

**Khoshkhoo Amiri Zahra** holds a PhD in Statistics at the Department of Statistics, University of Mazandaran, Iran. Her research interests are statistical inference, Bayesian estimation, records, prediction. Furthermore, she is committed to transferring statistical knowledge to students and enthusiasts in a clear and practical manner so that they can effectively apply statistics in their research. With educational background and relevant work experiences, she has robust research, teaching, and advisory skills in the field of statistics.

**Klochko Rostyslav** is a PhD Student at the Department of Mathematical Modeling and Statistics, Kyiv National Economic University named after Vadym Hetman. His research interests are the application of mathematical methods and models, including machine learning methods, to solve problems in marketing management. Rostyslav Klochko pays special attention to approaches of modelling the bank's customer behaviour. He is an active participant in scientific conferences and author of articles in both national and international scientific bodies.

**Kończak Grzegorz** is a Full Professor at the Department Statistics, Econometrics and Mathematics in University of Economics in Katowice, Poland. His research interests are statistical inference, data analysis, Monte Carlo study and permutation tests in particular. Professor Kończak has published more than 100 research papers in international/national journals and conferences. He has also published eleven books/monographs as an author or co-author. Professor Kończak is an active member of Polish Statistical Association.

**Korczyński Adam** is an Assistant Professor at the Institute of Statistics and Demography, Collegium of Economic Analyses, Warsaw School of Economics. He specializes in statistical modelling, in particular regression analysis including longitudinal data models, data quality aspects such as missing data and imputation techniques. He obtained a PhD degree in Economics in 2017 based on the thesis entitled: "Variance screen as a tool for detecting price collusion. Fundamentals and meaning of the imputation for missing data".

**MirMostafae S. M. T. K.** is an Associate Professor at the Department of Statistics, University of Mazandaran, Babolsar, Iran. His research interests are distribution theory, Bayesian inference, ordered data, record data, reliability and prediction. Dr. MirMostafae has published more than 50 research papers in international/national journals and conferences.

**Mukherjee Subhodeep** is working as an Assistant Professor in the Department of Operations, GITAM School of Business, GITAM (Deemed to be University), Visakhapatnam, India, Visakhapatnam, India. He obtained his Master's degree from

the Birla Institute of Technology, Mesra, Ranchi, India. He has publications in reputed journals and highly indexed book chapters. He has presented several papers in various conferences and has also received two best paper and best paper presented awards. His main research interests include food supply chain management, retail supply chain, cloud computing, artificial intelligent, and blockchain technologies. He has expertise in statistical techniques like SEM, etc.

**Oullada Oumaima** is a PhD candidate in industrial engineering at the Laboratoire de Productivité Mécanique et Génie Industriel, Fabrication Intégrée par Ordinateur (LMPGI) of the Ecole Supérieure de Technologie and the Ecole Nationale Supérieure d'Electricité et de Mécanique, Université Hassan II, Casablanca, Morocco.

**Pal Surya Kant** is currently working as an Assistant Professor in the Department of Mathematics, Sharda School of Basic Sciences and Research, Sharda University. He holds MPhil and PhD in Statistics from Vikram University Ujjain. He has worked with institution like BFIT-Groups of Institution, University of Petroleum and Energy Studies and Chandigarh University. His research area includes statistical techniques, sampling theory, and multivariate analysis. He has published more than 90 research papers in journals of national and international repute along with two book chapters. He is not only known in India but famous abroad too, serving as an editor and reviewer of more than 30 reputed international/national journals.

**Piskunova Olena** is a Professor at the Department of Mathematical Modeling and Statistics at Vadym Hetman Kyiv National Economic University. Professor Piskunova is a Doctor of Economics. She is a member of the editorial board of the periodical scientific journal "Modeling and Information Systems in Economics". Professor Piskunova has published 180 scientific works, including monographs, research articles, and conference papers. Her research interests include multivariate statistical analysis, econometric modelling methods, and machine learning.

**Rifai Said**, before his retirement, served as a Professor and Head of the Mechanical and Industrial Engineering Department at the High School of Technology in Casablanca, University Hassan II, Morocco. He earned his Ph.D. in Industrial Acoustics in 1988 from the University of Poitiers, France. He is a member of the Laboratory of Mechanical Engineering, Computer-Integrated Manufacturing, and Industrial Engineering (LMPGI), certified in Quality Management and Improvement from the High School of Technology and College Bois de Boulogne in Montreal, Canada. He is an expert in engineering and cross-disciplinary training, with a focus on quality, safety, environment, and logistics.

**Roychowdhury Anasuya** is an Associate Professor at the School of Basic Sciences of IIT Bhubaneswar, India. Her main areas of interest include oncogenic mechanisms of

gastrointestinal cancers, and cancer biomarkers. She has been a grant reviewer at Narodowe Centrum Nauk (National Science Centre), Poland.

**Satya Kumar Misra** has completed his MSc, MPhil degree from Utkal University and completed Ph.D. in 2014, from KIIT University, Bhubaneswar, India. Currently, he is working as an Associate Professor in the Mathematics at Department of Mathematics, KIIT University, Odisha. His area of research is reliability theory.

**Savitsky Terrance** is a Senior Research Mathematical Statistician at the U.S. Bureau of Labor Statistics. He obtained his Ph.D. in Statistics from Rice University. Dr. Savitsky's main research areas of interest include Bayesian modelling for survey data, including respondent and domain level data, nonparametric models, methods to construct privatizing mechanisms for survey data, and statistical data integration.

**Shyam Hari Shankar** is an eminent educationist, researcher and trainer in the areas of management education. He obtained his doctorate in the field of management and has done his Master's degree in Management in the area of Marketing. He has done a certificate course in SPSS & Cognos conducted by IBM & a Certificate program in Marketing by the marketing magnate Philip Kotler. He has a blend of industry academia experience of approximately 14 years. He is an expert in marketing planning & implementation, business analytics and strategy. His other areas of interest are brand, CRM, quality management & OB.

**Singh Garib Nath** is working as a Professor of the Department of Mathematics and Computing, Indian Institute of Technology (Indian School of Mines), Dhanbad – 826004, Jharkhand, India. He has more than 30 years of teaching experience in statistics. His research field is sample surveys, missing data analysis and data analysis. Professor Singh has published more than 200 papers in national and international journals of repute on sampling theory. He has worked as a PhD thesis examiner and paper setter of many other universities, such as BHU, Utkal University, BIT Mesra, IGNOU and Agra University.

**Stapor Katarzyna** is a Full Professor at the Department of Automatic Control, Electronics and Computer Science in the Silesian Technical University in Gliwice, Poland. Her research interests are statistical pattern recognition, multivariate statistical analysis, protein bioinformatics, computational neuroscience based on EEG analysis in particular. Professor Stapor has published more than 120 research papers in international/national journals and conferences including one monograph on pattern recognition and the coursebook for a lecture on statistical methods. Professor Stapor is an active member of several scientific professional bodies.

**Szymkowiak Magdalena** received her PhD degree in Mathematics from Adam Mickiewicz University in Poznan and was an Associate Professor at the Institute of Mathematics at the Poznan University of Technology. She prepared her habilitation

in the discipline of Automation, Electronic and Electrical Engineering, and now she is an Associate Professor at the Institute of Automatic Control and Robotics at Poznan University of Technology. Her research concerns data mining, reliability theory, and stochastic orders.

**Williams Matthew** is a Senior Research Statistician at RTI International. Dr. Williams collaborates on both methodological research for and practical implementation of a variety of statistical topics: complex survey sample design and analysis, time-series and time-to-event data, combining multiple data sources, disclosure avoidance, optimization, Bayesian modelling and computation, and evaluation and evidence building. Prior to RTI, he worked with several US federal statistical and science agencies. He also collaborated on international projects related to agriculture and public health. He obtained a PhD in Statistics from Virginia Tech.

**Wójciak Wojciech** is a PhD student at the Faculty of Mathematics and Information Science, Warsaw University of Technology. He holds a Bachelor of Science in Engineering degree and Master of Science in Mathematics degree, both obtained from the Warsaw University of Technology. His main areas of interest include: optimal sample allocation in complex sampling, convex optimization, applied statistics. He has over 15 years of experience working in various technical and managerial roles in international companies in telecommunication, pharmaceutical and financial industries.