



### Personal Info

Name : Dr. Adji Achmad Rinaldo Fernandes, S.Si, M.Sc  
 Functional position : Assistant Professor  
 Structural position : Head of Laboratory of Simulation and Computational Statistics  
 NIP/NIK : 198109082005011002  
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 Course taught : 1. Introduction to Regression Analysis  
 2. Survival Analysis  
 3. Multivariate Analysis  
 4. Multivariate Data Exploratory  
 5. Categorical Data Analysis  
 6. Introduction to Probability Theory  
 7. Linear Model  
 8. Statistics Modeling  
 9. Fuzzy Logic Model  
 10. Nonparametric and Semiparametric Regression  
 11. Bio-computation

### Education Background

Program	S1	S2	S3
University	Universitas Brawijaya Malang	Universiteit Hasselt Belgia	Institut Teknologi Sepuluh Nopember Surabaya
Department	Statistics	Statistics	Statistics
Year of entry-graduation	2000-2004	2006-2007	2011-2016
Title of final project/thesis/dissertation	Time Series Quality Control	Investigate the Color Distribution of M&M's Peanut in Belgium	Spline Estimator in Biresponse Nonparametric Regression for Longitudinal Data



			(Case Study of Lung TB Patients in Malang)
Supervisor/ Promotor	Ir. Henny Kusdarwati, MS Rahma Fitriani, S.Si, M.Sc	Dr. Ivy Jansen, Dr. Dirk Valkenburg	Prof. Dr. Drs. I Nyoman Budiantara, MSi, Dr. Bambang Widjanarko Otok, M.Si, Dr. Suhartono, S.Si, M.Sc

### Research Project

1. Update on Structural Modeling: Polynomial Nonlinear Modeling with Mixed Measurement Models in the Social-Humanities (2020)
2. Two-Stage Analysis of Geographically Weighted Regression (GWR) and Truncated Spline Regression (TSR) on Spatial Data (2020)
3. Evaluation and Development of Risk Models and Risk Metrics Based on Statistical Modeling with High Flexibility (2020)
4. Reconstruction of Structural Flexibility and Acceptance Model (SFAM) Based on Disruption Innovation in Social Humanities and Education (3<sup>rd</sup> Year) (2020)
5. Reconstruction of Structural Flexibility and Acceptance Model (SFAM) Based on Disruption Innovation in Social Humanities and Education (2<sup>nd</sup> Year) (2020)
6. Development of Path Analysis Estimation Based on Nonparametric Regression in Vegetative Growth Modeling and Porang Bulbs Production (3<sup>rd</sup> Year) (2019)
7. Reconstruction of Structural Flexibility and Acceptance Model (SFAM) Based on Disruption Innovation in Social Humanities and Education (1<sup>st</sup> Year) (2018)
8. Development of Path Analysis Estimation Based on Nonparametric Regression in Vegetative Growth Modeling and Porang Bulbs Production (2<sup>nd</sup> Year) (2018)
9. Development of Path Analysis Estimation Based on Nonparametric Regression in Vegetative Growth Modeling and Porang Bulbs Production (1<sup>st</sup> Year) (2017)
10. Parameter Estimator Efficiency in Latent Variable Path Analysis with Scale Data Using SRS and MSI Transformations (2017)
11. Comparison of Correlation Level between Responses in Birespon Nonparametric Regression Model Smoothing Spline Approach (2016)



### Community Development Program

1. Empowerment of Qualified Village Apparatuses and Superior Coffee Farmers through Statistics, Computing and Coffee Training towards the Advanced, Independent and Self-Sufficient Villages (2018)
2. Study Group: Strengthening Statistics Modeling in Management (2<sup>nd</sup> Year) (2018)
3. Refreshing Data Analysis Using Microsoft Excel for Teachers of Miftahul Huda Foundation (Islamic Elementary School & Junior High School) in Wajak, Malang Regency (2018)
4. Study Group: Strengthening Statistics Modeling in Management (1<sup>st</sup> Year) (2017)
5. Mapping the Potential of Bendosari Village Based on Multivariate Explorative (2017)
6. Spatial Analysis Training for Teaching Staff at Central Sulawesi Region Universities (2017)
7. Training in Research Methods, Data Analysis, and Interpretation for Young Lecturers (2016)

### Journal Publication

1. Corporate governance, corporate profitability toward corporate social responsibility disclosure and corporate value (comparative study in Indonesia, China and India stock exchange in 2013-2016). *Social Responsibility Journal* (2019).
2. Effectiveness of the ARIMA and Multiscale Autoregressive (MAR) Models with MODWT Decomposition on Non-Stationary Data. *IOP Conference Series: Materials Science and Engineering* Vol. 546 (2019).
3. The Estimation Function Approach Smoothing Spline Regression Analysis for Longitudinal Data. *IOP Conference Series: Materials Science and Engineering* Vol. 546 (2019).
4. Geographically Weighted Regression in Cox Survival Analysis for Weibull Distributed Data with Bayesian Approach. *IOP Conference Series: Materials Science and Engineering* Vol. 546 (2019).
5. Estimation of Truncated Spline Function in Nonparametric Path Analysis Based on Weighted Least Square (WLS). *IOP Conference Series: Materials Science and Engineering* Vol. 546 (2019).
6. Mixed Second Order Indicator Model: The First Order Using Principal Component Analysis and The Second Order Using Factor Analysis. *IOP Conference Series: Materials Science and Engineering*. Vol. 546 (2019).



7. Comparison of Curve Estimation of the Smoothing Spline Nonparametric Function Path Based on PLS and PWLS In Various Levels of Heteroscedasticity. IOP Conference Series: Materials Science and Engineering Vol. 546 (2019).
8. Welding technology as the moderation variable in the relationships between government policy and quality of human. Journal of Science and Technology Policy Management Vol. 10 No. 1 (2019).
9. Sustaining innovation and change in government sector organizations: Examining the nature and significance of politics of organizational learning. Journal of Strategy and Management Vol. 12 No. 1 (2019).
10. The effect of community and company participation and implementation of good forest fire governance on the forest fire policy in Indonesia. Journal of Science and Technology Policy Management Vol. 10 No. 1 (2019).
11. Biplot Analysis on Mapping of Coastal Object of South Traffic Line of Malang with Variable of Service Marketing Mix. IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
12. Reconstruction of Structural Flexibility and Acceptance Model (SFAM) in Green Marketing Mix Strategy. IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
13. The Consistency of Bootstrap Resampling in Structural Model with PLS-PM Approach: Technology Acceptance Model in Green Marketing Management Strategy. IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
14. Two Step Cluster Analysis for Tourist Segmentation Coastal Object for Green Marketing Strategy. IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
15. Modeling of Multigroup Based Structural Equations with Path Analysis Approach (Application in Green Marketing Strategy in Traditional and Modern Food in Indonesia). IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
16. Smoothing Spline Nonparametric Path: Application for Green Product and Green Marketing Strategy towards Green Product Purchasing Intention. IOP Conference Series: Earth and Environmental Science Vol. 239 (2019).
17. Comparison of Two Weighting Functions in Geographically Weighted Zero-Inflated Poisson Regression on Filariasis Data. Journal of Physics: Conference Series Vol. 1097 No. 1 (2018).



18. The influence of organizational culture and job design on job commitment and human resource performance. *Journal of Organizational Change Management* Vol. 31 No. 7 (2018).
19. The effect of organization culture and technology on motivation, knowledge asset and knowledge management. *International Journal of Law and Management* Vol. 60 No. 5 (2018).
20. The mediating effect of work motivation on the influence of job design and organizational culture against HR performance. *Journal of Management Development* Vol. 37 No. 6 (2018).
21. The estimation of time-varying risk in asset pricing modeling using B-Spline method. *Journal of physics: Conference Series* Vol.943 No.1 (2018).
22. The importance of open government data for the private sector and NGOs in Indonesia. *Digital Policy, Regulation and Governance* Vol. 20 No. 4 (2018).
23. Hydroseeding Application Using Pioneer Local Plant Seeds for Coal Postmining Soil in Tanah Laut Regency, South Kalimantan. *Journal of Degraded and Mining Lands Management* Vol.5 No.4 (2018).
24. Comparing seeds germination of some local plant species on two hydroseeding mulches for post mining re-vegetation. *Journal of Degraded and Mining Lands Management* Vol.5 No.2 (2018).
25. Comparison of spline estimator at various levels of autocorrelation in smoothing spline non-parametric regression for longitudinal data. *Communications in Statistics - Theory and Methods* Vol.46 No.24 (2018).
26. The Mediating Effect of Service Quality and Organizational Commitment on the Effect of Management Process Alignment on Higher Education Performance in Makassar, Indonesia. *Journal of Organizational Change Management* Vol.30 No.7 (2018).
27. The Mediation Effect of Customer Satisfaction in Relationship between Service Quality, Service Orientation and Marketing Mix Strategy to Customer Loyalty. *Journal of Management Development* Vol. 37 No. 1 (2018).
28. Comparison of Spline Estimator at Various Levels of Autocorrelation in Smoothing Spline Nonparametric Regression for Longitudinal Data. *Communications in Statistics – Theory and Methods* Vol.46 No.24 (2018).
29. The Efficiency of Parameter Estimation of Latent Path Analysis Using Summated Rating Scale. *AIP Conference Proceedings* Vol. 1913 No.020037 (2017).



30. Estimation of Spline Function in Nonparametric Path Analysis Based on Penalized Weighted Least Square (PWLS). AIP Conference Proceedings No. 020030 (2017).
31. Moderating effects orientation and innovation strategy on the effect of uncertainty on the performance of business environment International. Journal of Law and Management Vol. 59 No. 6 (2017).
32. Investigate the instrument validity consistency between criterion validity and unidimensional validity (Case Study in management research). International Journal of Law and Management Vol. 59 No. 6 (2017).
33. The mediation effect of strategic orientation and innovations on the effect of environmental uncertainties on the performance of business in the Indonesian aviation industry International. Journal of Law and Management Vol. 59 No. 6 (2017).
34. Investigation the mediating variable: What Necessary? (Case Study in Management Research) International. Journal of Law and Management Vol. 59 No. 6 (2017).
35. The Effect of OCB in Relationship between Personality, Organizational Commitment and Job Satisfaction to Performance. Journal of Management Development Vol. 36 No. 10 (2017).
36. Moderation effect of organizational citizenship behavior on the performance of lecturers. Journal of Organizational Change Management Vol. 30 No. 7 (2017).
37. Modeling of Role of Public Leader, Open Government Information and Public Service Performance in Indonesia. Journal of Management Development Vol. 36 No. 9 (2017).
38. The Efficiency of Curve Regression Using Linier and Quadratic Truncated Spline for Estimated Growth Curve of Green Beans. International Journal of Control Theory and Applications Vol. 10 No. 2 (2017).
39. The Efficiency of Curve Regression In Semiparametric Smoothing Spline Regression Models With And Without Penalty. International Journal of Control Theory and Applications Vol. 10 No. 1 (2017).
40. The Comparison of Spline Estimators in the Smoothing Spline Nonparametric Regression Model Based on Weighted Least Square (WLS) and Penalized Weighted Least Square (PWLS) in Longitudinal Data (A Study on the Growth of 0-2 Years Old Babies in Indonesia). International Journal of Control Theory and Applications Vol. 10 No. 1 (2017).
41. Multi-Response Linear Mixed Model (MLMM) for Longitudinal Data: Modeling Agricultural Waste: Plant Rice Straw, Clove Leaf And Water Hyacinth. International Journal of Chemtech Vol. 9 No 11 (2016).



42. Multi-responses Model in Patients Suffering from Decubitus Wound Using Generalized Penalized Spline. *International Journal of Pharmtech* Vol. 9 No 9 (2016).
43. Modeling of Multi-Response Longitudinal Data Using Linear Mixed Modeling Patient with Pulmonary Tuberculosis in Syaiful Anwar Hospital Malang. *International Journal of Pharmtech* Vol. 9 No. 9 (2016).
44. The Mediation Effect on Interleukin-6 and Cortisol in Hipocampus in relationship between Interleukin-6 and Cortisol in plasma to effect of psychological stressor on serotonin transporter (SERT) distribution and apoptotic index of hippocampus. *International Journal of Chemtech* Vol. 9 No. 9 (2016).
45. The Effect of Correlation between Responses in Bi-Response Nonparametric Regression Using Smoothing Spline. *Communication in Applied Analysis* Vol. 20 No. 32015.
46. Truncated Spline for Estimating the Curve of Nonparametric Regression Bi-responses For Predicting the Inflation and Economic Growth in Malang, Indonesia, Year 2001-2015. *International Journal of Social Relevance & Concern* Vol. 4 No. 9 (2015).
47. Expectation and Maximization Algorithm for Estimation in Random and Fixed Effect Model in Mixed Model. *International Journal of Social Relevance & Concern* Vol. 4 No. 9 (2015).
48. Spline Estimator for Bi-Responses and Multi-Predictors Nonparametric Regression Model in Case of Longitudinal Data. *Journal of Mathematics and Statistics* Vol. 11 No. 2 (2015).
49. Reproducing Kernel Hilbert Space and Penalized Weighted Least Square in Nonparametric Regression. *Applied Mathematical Science* Vol. 8 No. 146 (2014).
50. Comparative Method in PCA and PLS Cox Regression to Solve Multicollinearity. *Global Journal of Pure and Applied Mathematics* Vol. 10 No. 4 (2014).
51. Reproducing Kernel Hilbert Space for Penalized Regression multi-predictors: case in longitudinal data. *International Journal of Mathematical Analysis* Vol. 8 No. 40 (2014).
52. Spline estimator for bi-responses nonparametric regression model for longitudinal data. *Applied Mathematical Sciences* Vol. 8 No. 114 (2014).
53. Reproducing Kernel Hilbert space and penalized weighted least square in nonparametric regression. *Applied Mathematical Science* Vol. 145-148 (2014).



#### Scientific Paper Presentation in Conference / Scientific Seminar

1. 7th Channel network Conference of the International Biometric Society at Rothamsted research. The Consistency of Bootstrap Resampling on the Path Analysis Model with Various Resampling Sizes. Harpenden-United Kingdom, July 10-12, 2019.
2. The European Conference on Sustainability, Energy and the Environment. The Modelling of Sustainable Management Design of Oxbow-Lake in Indonesia. Brighton, United Kingdom, July 9-10, 2019.
3. The European Conference on Psychological and the Behavioural Science. Confirmatory Factor Analysis as a Part of Measures of the SDGs in East Java Indonesia. Brighton, United Kingdom, July 5-6, 2019.
4. Annual Basic Science International Conference 2019. Comparison Of Curve Estimation Of The Smoothing Spline Nonparametric Function Path Based On PLS And PWLS In Various Levels Of Heteroscedasticity. Malang, March 20-21, 2018.
5. International Interdisciplinary Studies. Comparison of the Use of Bootstrap and Jackknife Resampling in Structural Model With PLS-PM Approach. Malang, November 20-21, 2018.
6. International Symposium on Education, Psychology and Social Sciences. Nonparametric Path Analysis Based on Smoothing Spline. Tokyo, September 7-8, 2018.
7. Konferensi Nasional Matematika XI, Universitas Brawijaya 2018. Comparison of the Use of Uniform and Gaussian Kernels in Local Polynomial Nonparametric Regression of Biresponse Kernels. Malang, July 23-24, 2018.
8. SEMIRATA dan ICST 2018. Nonparametric Path Analysis of Linear and Quadratic Orders. Medan, May 4-6, 2018.
9. International Conference & Workshop on Mathematical Analysis and Its Application. The Comparison of Spline Estimators in the Smoothing Spline Nonparametric Regression Model Based on Weighted Least Square (WLS) and Penalized Weighted Least Square (PWLS) in Longitudinal Data (A Study on the Growth of 0-2 Years Old Babies in Indonesia). Malang, August 2-3, 2017.
10. The 7th Annual Basic Science International Conference 2017. Paper 1: The Effect of Heteroscedasticity Error Variance Level in Smoothing Spline Nonparametric Regression, Paper 2: The Parameter Estimation Efficiency of Path Analysis Using Summarated Rating Scale and Rasch Model for Transformational of Score to Scale. Malang, March 7-8, 2017.





11. Konferensi Nasional Matematika. Paper 1: Reproducing Hilbert Space Kernel in Biresponse Nonparametric Regression Model for Longitudinal Data, Paper 2: Development of Non-Linear Principal Component Analysis Model in Formative Indicator Measurement of Mixed Scale. Riau, November 2-5, 2016.
12. Asian Mathematical Conference. The Effect Of Correlation Between Responses In Bi-Response Nonparametric Regression Using Smoothing Spline. Denpasar, July 2016.

#### Textbook Publication

1. Pemodelan Statistika pada Analisis Survival dan Analisis Reliabilitas (2016, UB Press)
2. Metode Statistika Multivariat Pemodelan Persamaan Struktural (SEM) Pendekatan Warppls (2017, UB Press)
3. Metode Penelitian Kuantitatif Perspektif Sistem., (2018, UB Press)
4. Metode Statistika Multivariat: General Structural Component Analysis (GSCA), Pemodelan Persamaan Struktural (SEM), (2019, UB Press)

#### Patent and Protected Rights

1. No. EC00201813511, May 22, 2018, Intellectual Property Rights of Statistical Modeling in Reliability and Survival Analysis.
2. No. EC00201848925, December 27, 2018, Intellectual Property Rights of Multivariate Statistical Methods: Structural Equation Modeling (SEM) WarpPLS Approach.
3. No. EC00201977306, October 22, 2019, Intellectual Property Rights of Multivariate Statistics Method, Generalized Structured Component Analysis (GSCA), Structural Equation Modeling (SEM).

#### Public Policy Formulation Participation

1. Malang City Development Planning Study in the form of Measuring Economic Growth, Gini Index, Creative Economic Growth Index, Infrastructure Services Satisfaction Index, Malang City Environmental Quality Index 2017 and 2018-2023 Projection.
2. Preparation of Malang City Performance Indicators in the form of Measurement and Projection Indicators for Education, Health Index, Purchasing Power Index, PMKS Decrease, Community Development Index, Gender Development Index, and 2017 Malang City Social Capital Index and 2018-2023 Projection.



3. Research and Measurement of 2018-2023 Creative Economy Numbers and 2019-2023 Projection in Malang City.
4. Analysis of the Regional Tax Potential of Palangkaraya City 2019.
5. The concept of social protection from an early age through the Life Insurance and Accident Insurance Program in Indonesia 2019.

#### Awards

1. 10 Years Civil Servant Award 2018
2. Highly commended - Emerald Literati Awards 2019