

KEVIN CARL P. SANTOS

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Assistant Professor 5

Education

- Ph.D. in Statistics (candidate), School of Statistics, University of the Philippines Diliman (June 2013 – Present), Dissertation Proposal: Approaches to Person Fit Analysis in Cognitive Diagnosis Modeling, Advisers: Dr. Jimmy de la Torre and Dr. Erniel Barrios
- Visiting Research Scholar, Department of Educational Psychology, Graduate School of Education, Rutgers, The State University of New Jersey, (August 2015 – August 2016), Supervisor: Dr. Jimmy de la Torre
- M.S. in Statistics, School of Statistics, University of the Philippines Diliman (June 2009 – April 2011), Thesis: Predictive Accuracy of Fitted Logistic Regression using Ranked Set Sample, Adviser: Dr. Erniel Barrios
- B.S. in Statistics, School of Statistics, University of the Philippines Diliman (June 2005 – April 2009)

Academic Appointment

- Assistant Professor 5, School of Statistics, University of the Philippines Diliman (January 2014 – Present)
- Assistant Professor 1, School of Statistics, University of the Philippines Diliman (August 2011 – December 2013)
- Instructor 3, School of Statistics, University of the Philippines Diliman (June 2009 – July 2011)

Awards/Scholarship/Grants

- University of the Philippines Diliman Research Dissemination Grant 2016
Recipient for Paper Presentation in Oviedo, Spain
- University of the Philippines Alternative Study (Sandwich Program) 2015
Grant Recipient as Visiting Research Scholar in Rutgers,
The State University of New Jersey, USA
- International Association of Survey Statisticians (IASS) 2015
Cochran-Hansen Prize for Young Survey Statistician in Developing Countries 2015

- International Meeting of the Psychometric Society (IMPS) 2015
Pearson Travel Award 2015
- University of the Philippines Diliman Research Dissemination Grant 2015
Recipient for Paper Presentation in Beijing, China
- Commission on Higher Education (CHED) 2013
Faculty Development Program – Phase II Scholarship Grant Recipient
- University of the Philippines Diliman Research Dissemination Grant 2013
Recipient for Paper Presentation in Hong Kong, China
- Commission on Higher Education (CHED) Support 2012
For Paper Presentation in International Conferences Recipient
- Philippine Social Science Center Travel Assistance Program Grant 2012
Recipient for Paper Presentation in Louisiana, USA
- 3rd Most Outstanding Teacher in Statistics Undergraduate Core Courses 2012
(2nd Semester, A.Y. 2011-2012)
- Statistical Research and Training Center (SRTC) Thesis Grant Recipient 2011
- Cum Laude (GPA: 1.451) 2009

Publications

- Santos, K. and Barrios, E. (2017). Improving Predictive Accuracy of Logistic Regression Model Using Ranked Set Samples. *Communications in Statistics - Simulation and Computation*, 46 (1), 78-90.
- Labitag, A., Aquino, E., Ramos, M, Santos, K. (2016). Risk Factors for Locoregional Metastasis, Distant Metastasis and Persistent Disease in Micropapillary Thyroid Cancer among Filipinos, *Philippine Journal of Internal Medicine*, 54 (2).
- Ketherine, Mirasol, R., Santos, K. (2016). Correlation of Percent Body Fat by Bioelectrical Impedance Analysis with Anthropometric and Metabolic Variables among Adult Filipinos, *Philippine Journal of Internal Medicine*, 54 (2).
- Santos, K. (2014). Modelling Zero-Inflated Clustered Data: A Semiparametric Approach. *The Philippine Statistician*. 63 (1), 21-31.
- Carlos, A., Mirasol, R., Aquino, E., Goco, M., Toledo, P., and Santos, K. (2014). Management and Malignancy Rate of Thyroid Nodules with a Cytologic Diagnosis of Atypia or Follicular Lesion of Undetermined Significance. *Journal of the ASEAN Federation of Endocrine Societies*. 29 (1), 78-84.
- Ching, M., Yap, J. M., Santos, K., Ong, C., and Ramos, J. (2013). Correlation of total IgE,

house-dust mite specific IgE and absolute eosinophils in an asthmatic pediatric population. *Philippine Science Letters*. 6(2), 241-248.

- Santos K., Castillo, M., de Jesus, R., Telan, N., and Vidal, C. (2012). Nonparametric Bootstrap Estimation of the Population Ratio using Ranked Set Sampling. *The Philippine Statistician*. 61 (2), 53-66.
- Santos, K. (2012). Ranked Set Sampling. *The Philippine Statistician*. 61(1), 123-127.
- Santos, K. and Salagubang J. (2011). Investigating the Efficiency of Stratified Ranked Set Sampling using Nonparametric Bootstrap Estimation Approach. *The Philippine Statistician*. 60, 15.-30.

Papers Presented in Conferences

- Santos, K., de la Torre, J., & Barrios, E. (2016, August). *Using forward search algorithm for person fit analysis in general cognitive diagnosis models*. Paper to be presented at the International Conference on Computational Statistics, Oviedo, Spain.
- Santos, K., de la Torre, J., & von Davier, M. (2016, July). *Estimating mixture fit index for cognitive diagnosis models*. Paper presented at the Annual Meeting of the Psychometric Society, North Carolina, USA.
- Santos, K. and Barrios, E. (2015, July). *Improving Predictive Accuracy of Logistic Regression Model Using Ranked Set Samples*. Paper presented at the 60th World Statistics Congress, Rio de Janeiro, Brazil.
- Santos, K., de la Torre, J., & Barrios, E. (2015, July). *Detecting aberrant examinees in cognitive diagnosis models*. Paper presented at the Annual Meeting of the Psychometric Society, Beijing, China.
- Santos, K. and Borlongan, M. (2014, November). *Integrating Sampling Weights with Cognitive Diagnosis Models*. Paper presented at the International Statistical Institute Regional Statistics Conference, Kuala Lumpur, Malaysia.
- Santos, K., de Guzman, G., Peña, M., and Saladar, N. (2014, November). *Using Principal Component Analysis in Index Construction: Application to Construction Material Prices and Building Permit Applications*. Paper presented at the International Statistical Institute Regional Statistics Conference, Kuala Lumpur, Malaysia.
- Calimon, M., Dujunco, M., Mata, A., Villa, M., and Santos, K. (2014, November). *Mellitus Prevalence and Characteristics of Diabetic Peripheral Neuropathy Using*

Toronto Clinical Scoring System (TCSS). Poster presented at the 15th Asia Ocenia Congress of Endocrinology, Cebu, Philippines.

- Labitag, A., Aquino, E., Ramos, M., and Santos, K. (2014, November). *Thyroid Diseases Predictive Factors for Locoregional, Distant Metastasis and Persistent Disease in Micropapillary Thyroid Cancer among Filipinos*. Poster presented at the 15th Asia Ocenia Congress of Endocrinology, Cebu, Philippines.
- Santos, K., de Guzman, G., Peña, M., and Saladar, N. (2014, September). *Applying Principal Component Analysis to Construction Material Prices and Building Permit Applications: A Housing-related Index*. Paper presented at the Annual Philippine Statistical Association Inc., Cebu, Philippines.
- Ching, M., Ramos, J. Ong, C., Yap, J., and Santos, K. (2013, November). *Influence of Asthma Genetics to Susceptibility and Asthma Phenotypes among Selected Pediatric Population: SNPS in Eotaxin and IL-5 Genes*. Paper presented at 2013 Asia Pacific Congress of Allergy, Asthma and Clinical Immunology, Taipei, Taiwan.
- Barrios, E., Santos, K., and Gauran, I. (2013, October) *Use of Principal Component Scores in Sampling with Multiple Frames*. Paper presented at the 12th National Convention on Statistics, Manila, Philippines.
- Barrios, E., Sarte, G., Lansangan, J., Nalica, A., Santos, K., and Gauran, I. (2013, October). *Competency of Graduating Students and Entry Level Workers in IT-BPO Industry*. Paper presented at the 12th National Convention on Statistics. Manila, Philippines.
- Abejo, P., Barrios, E., Gauran, I., Labina, C., Lansangan, J., Lucagbo, M., Nalica, A., Santos, K., Sarte, G., Supranes, M. and Villejo, S. (2013, October). *The Philippine ICT Industry and its Contributions to Inclusive Growth*. Paper presented at 12th National Convention on Statistics. Manila, Philippines.
- Barrios, E. and Santos, K. (2013, August). *Using Principal Component Scores as Stratification Variable: An Alternative to Multiple Frame Sampling Methodology*. Paper presented at the 59th World Statistics Congress, Hong Kong, China.
- Santos, K. and Barrios, E. (2012, October). *Predictive Accuracy of Fitted Logistic Regression Model using Ranked Set Samples*. Paper presented at the International Conference on Methods for Surveying and Enumerating Hard-to-Reach Populations, New Orleans, Louisiana, USA.
- Mapa, D., Sarte, G., and Santos, K. (2009, October). *Extracting the Common Component of Several Time Series: Comparison of Linear and Non-Linear*

Procedures. Paper presented at the 10th Student-Faculty Conference on Statistical Sciences, Laguna, Philippines.

- Santos, K., Poblador, S., and Atienza, I. (2008, October). *Are Food Prices Biased Toward Metro Manila?: An Analysis of Stochastic and Dynamic Convergence of Provincial Food Prices.* Paper presented at the 9th Faculty-Student Conference on Statistical Sciences, Quezon City, Philippines.

Trainings

Resource Speaker

- Training on Basic Statistics with Exploratory Data Analysis, UP Statistical Center Research Foundation Inc., September 2016.
- Training on Basic Statistics with Exploratory Data Analysis, UP Statistical Center Research Foundation Inc., May 2015.
- Training on Market Segmentation and Predictive Modeling, UP Statistical Center Research Foundation Inc., October 2014.
- Workshop on Training Program Assessment, Armed Forces of the Philippines Office of the Deputy Chief of Staff for Education and Training, OJ8, August 2014.
- Training on Basic Statistics with Exploratory Data Analysis, UP Statistical Center Research Foundation Inc., July 2014.
- Training on Statistical Treatment of Data, Centro Escolar University. June 2014.
- Training on Structural Equation Modeling using Stata, UP Virata School of Business, November 2013.
- Training on Market Segmentation and Predictive Modeling, UP Statistical Center Research Foundation Inc., October 2013.
- Training on Basic Statistics with Exploratory Data Analysis, UP Statistical Center Research Foundation Inc., October 2013.
- Training on Market Segmentation and Predictive Modeling, UP Statistical Center Research Foundation Inc., May 2013.
- Training on Statistical Analysis using Stata. Statistical Research and Training Center, April 2013.
- Training on Application of Statistical Package (Stata version 11), UP Statistical Center Research Foundation Inc., April 2013.
- Training on Seasonal Adjustment and Estimation of Missing Data, Statistical Research and Training Center, October 2011.

Teaching Experience

- Stat 138 – Introduction to Sampling Designs
- Stat 136 – Introduction to Regression Analysis
- Stat 149 – Introduction to Categorical Data Analysis
- Stat 133 – Bayesian Statistical Inference
- Stat 125 – Applications Software and Software Packages
- Stat 101 – Elementary Statistics
- Stat 135 – Matrix Algebra for Statistics
- Stat 117 – Mathematics for Statistics
- Stat 130 – Introduction to Mathematical Statistics for Computer Science
- Stat 121 – Probability Theory I
- Stat 122 – Probability Theory II

Professional Affiliations

- Psychometric Society Member (2014 up to present)
- American Statistical Association (ASA) Member (2013 up to present)
- International Statistical Institute (ISI) Member (2013 up to present)
- National Council on Measurement in Education (NCME) Student member (2015 up to present)
- Philippines Statistical Association (PSA) Life Member (2012 up to present)
- U.P. School of Statistics Alumni Association, Inc. Member (2009 up to present)