

DOMINIC BAGUS DAYTA


Academic publications under Dominic Dayta, D.B. Dayta, or D. Dayta

Literary publications under Dominic Dayta

Languages: English (Native-Level: TOEIC 990/990). Filipino (Native), French (Niveau B1), Japanese (N5)

Doctoral Student | Nara Institute of Science and Technology (NAIST)

Nara, Ikoma, Takayamacho, Japan 8916-5

 www.dominicdayta.com

CAREER

株式会社MIND IN A DEVICE, Tokyo, Japan

Part-time Developer (October 2024 to February 2025)

Designed a front-end app for an AI model analyzing point-clouds from drone images

Tech Stack: Electron, VueJS, FastAPI

EAT FRESH PHILIPPINES, Pasig City, Philippines

Part-time Developer (June 2022 to March 2023)

Developed a light HR Information System (HRIS) to manage employees across restaurant branches.

Tech Stack: Laravel, AWS EC2, PostgreSQL

SCHOOL OF STATISTICS, UNIVERSITY OF THE PHILIPPINES, Quezon City, Philippines

Assistant Professor (February 2022 to January 2023)

Senior Lecturer (September 2021 to January 2022; February 2023 to July 2024)

Subjects taught: Categorical Data Analysis, Computational Statistics, Statistical Quality Control

BR. ALFRED B. SHIELDS OCEAN RESEARCH (SHORE) CENTER, De La Salle University, Manila, Philippines

Consulting Statistician (July 2021 to August 2022)

"Project ExPERT: Examination of Possible Eutrophication of the Reefs in Tubbataha".

Primary Investigator: Wilfredo A. Licauanan, Ph. D.

GLOBAL QUALITY CONTROL, JOLLIBEE WORLDWIDE SERVICES, Pasig City, Philippines

Lead a team of data scientists in crafting regular and ad-hoc reports regarding service and food quality in restaurant branches worldwide.

Quality Management Officer (2019 to 2021) Data Science Lead

Quality Management Specialist (2017 to 2019) Quality Control Statistician

EDUCATION

DOCTOR OF PHILOSOPHY, MATHEMATICAL INFORMATICS (2023 to 2026)

Graduate School of Information Science, Nara Institute of Science and Technology

Ikoma City, Nara Prefecture, Japan

Doctorate Advisor: Ikeda Kazushi, Ph. D.

MEXT Top Global University Project Scholar (2023 to 2025)

NAIST GRANITE Project Scholarship (2025 to 2026)

MASTER OF SCIENCE, STATISTICS (2017 to 2021)

School of Statistics, University of the Philippines

Diliman, Quezon City, Philippines

GWA: 1.4091/1.0000

Master's Thesis: *Semiparametric Latent Topic Modeling on Consumer-Generated Corpora* (In: Annals of Data Science)

Research Advisor: Emiel B. Barrios, Ph. D.

BACHELOR OF SCIENCE, STATISTICS (2013 to 2017)

School of Statistics, University of the Philippines

Diliman, Quezon City

Magna cum laude, GWA: 1.4155/1.0000

Other Honors Received: *Best Undergraduate Student Paper Award*, *Amelia Lapeña-Bonifacio Literary Prize (3 citations)*, *Gawad Rogelio Sicat*

FELLOWSHIPS AND SPECIAL TRAINING

MACHINE LEARNING SUMMER SCHOOL (March 4-15, 2024)

Okinawa Institute of Science and Technology (OIST), RIKEN-AIP

OIST Conference Center, Okinawa, Japan

Presentation: *Nonparametric Topics Over Time and Space*

HONORS AND ACHIEVEMENTS

1. **GRANITE Project Scholarship.** In support of top doctorate research projects by the Nara Institute of Science and Technology. (2025-2026).
2. **Young Author Award.** International Symposium on Artificial Life and Robotics (ISAROB). Beppu, Oita Prefecture, Japan (January 2025).
3. **Japanese Government MEXT Top Global University Project Scholarship** (2023-2025).
4. **1st Place for Breakthrough Idea.** Accenture Big Data Challenge. Conferred by Accenture Philippines (2018)
5. **Best Undergraduate Student Paper Award.** 1st place, conferred by the School of Statistics and the Philippine Statistical Training and Research Institute, UP Diliman (June 2017)
6. **Magna cum laude**, B.S. in Statistics (June 2017)
7. **1st and 2nd place for the short story.** Amelia Lapeña-Bonifacio Literary Awards, conferred by the Department of English and Comparative Literature, UP Diliman (2017)
8. **1st place for the short story.** Gawad Rogelio Sicat, conferred by the Kolehiyo ng Wikang Filipino, UP Diliman (2016)
9. **2nd place for the short story.** Amelia Lapeña-Bonifacio Literary Awards, conferred by the Department of English and Comparative Literature, UP Diliman (2015)
10. **2nd place for nonfiction.** World War II True Stories Contest, conferred jointly by the Philippine Daily Inquirer and Philippine Veterans Bank (2013)

SCIENTIFIC PUBLICATIONS

1. **DB Dayta**, T Kubo, K Ikeda, "Variance Control for Black Box Variational Inference Using the James-Stein Estimator." *Artificial Life and Robotics*. In Press.
2. BG Lim, **DB Dayta**, BR Tiu, RR Tan, LPD Garces, I Ikeda, "Dynamic Factor Analysis of Price Movements in the Philippine Stock Exchange." *Financial Innovation*. In Press.
3. **DB Dayta**, EB Barrios, "Semiparametric latent topic modeling on consumer-generated corpora." *Annals of Data Science*. January 2025. DOI: 10.1007/s40745-025-00587-y.

CONFERENCE CONTRIBUTIONS

1. **DB Dayta**, T Kubo, K Ikeda, "Variance Control for Black Box Variational Inference Using the James-Stein Estimator." International Symposium on Artificial Life and Robotics (ISAROB). 22-24 January, 2025. Beppu, Oita Prefecture, Japan.
2. MA Adraincem, ZR Jacobe, KM Jamera, A Meandahawi, **DB Dayta**, "Cashless Payments and Economic Growth in the ASEAN-5 Countries: An Empirical Study." Contributed paper: *11th National Business and Management Conference*, organized by the Philippine Academy of Management (PAOM). 25 November, 2023.
3. **DB Dayta**, SM Escalante, "A Semiparametric Approach to Empirical Bayes Estimation of Discrete False Discovery Rates Using Kernels." Contributed paper: International Association for Statistical Computing – Asia Regional Section (IASC-ARS) Interim Conference. 12-13 December, 2022. Hong Kong.
4. **DB Dayta**, DD Dayta, "Introducing computer-age statistical methodologies through interactive web apps: experimental evidence from a Filipino classroom." Contributed paper: *11th International Conference on*

Teaching Statistics, organized by the International Association for Statistics Education (IASE). 11-16 September, 2022. Rosario, Argentina.

5. **DB Dayta**, EB Barrios, "Semiparametric latent topic modeling on consumer-generated corpora." Abstract presentation: *COMPSTAT 2022*, organized by the International Association for Statistical Computing (IASC). Bologna, Italy. 23-26 August, 2022. Available as an arXiv preprint: arXiv:2107.10651 [cs.CL]
6. **DB Dayta**, EB Barrios, "Topic modeling on consumer-generated corpora." Contributed talk: *2019 National Conference on Statistics*, organized by the Philippine Statistical System. Crowne Plaza Manila Galleria, Quezon City, Metro Manila
7. SM Escalante, PB Donato, IM Benabaye, **DB Dayta**, "Data visualization for the new age: an experimental study exploring the merits of human perception on visualization techniques for improved statistical communication." *10th International Conference on Teaching Statistics*, organized by the International Association for Statistics Education (IASE). 8-13 July, 2018. Kyoto, Japan.

ADVISING AND MENTORSHIP

Have consulted for >50 students (both graduate and undergraduate) on conducting statistical analysis for their thesis. Many have been published in peer-reviewed journals, or accepted for presentation at international conferences. Have also conducted statistical consultation for professional researchers which led to published papers. Below are some selected publications resulting from these consultations:

- Seng, K. S., Malilay, O. R. M., Pascual, J. L. R., Baticulon, R. E., & Tecson III, J. V. (2023). "Perceptions of Selected Undergraduate Medical Students in the Philippines on the Effectiveness of the Combined Use of Plastinated and Formalin-preserved Brains in Neuroanatomy Education: A Cross-sectional Study." *Acta Medica Philippina* (Vol. 57, Issue 10). University of the Philippines Manila. DOI: 10.47895/amp.v57i10.7225
- Toh, A.M.L., Lee, S.E.U., Su, J.W., De Guzman, A.M.B., & Meandahawi, A.N.Y. (2023). "Financial Literacy and Fintech Adoption Among Millennials in Metro Manila, Philippines: An Analysis." Contributed paper: *11th National Business and Management Conference*, organized by the Philippine Academy of Management (PAOM). 25 November, 2023.
- Gutierrez, M.L., Hechanova, J.D., and Meandahawi, A. "The Significance of Microfinance to Pototan Rice Farmers in the Philippines: An Analysis." *Nexus Among Government, Industry, and Academe: 10th National Business Management Conference*. 25-26 November, 2022. ISSN 2345-8720.
- Marasigan, S.R., Navarro, J., Palanca, P., and Pantoja, E. "The Effects of Guerilla Marketing In Small and Medium-Sized Enterprises In Metro Manila, Philippines." *Journal of Economics, Finance, And Management Studies* 6(1). January 2023. DOI: 10.47191/jefms/v6-i1-56
- Beltrano, S. R., Follosco, S. S., Saraza, R. O., & Vinson, J. A. (2022). An analysis on the bidirectional causal relationship between ESG performance and corporate financial performance of publicly-listed companies under sensitive industries in the ASEAN-4 emerging countries. December 2022. Retrieved from https://animorepository.dlsu.edu.ph/etdb_acc/37
- Catalig, A.B.N., Decena, C.J.M., Franco, M.D.A, Ventura, M.C.L., and Legaspi, J.L.R. "The Impact of Adjustment, Agency, and Political Costs on Cost Stickiness of Publicly-listed Companies in the Philippines from 2009-2019." *DLSU Business & Economics Review* 32(1) 2022 p. 136-147
- Conopio, M., Japor, R. K., Blanco, A. C., and Tamondong, A. M. "Estimation Of Chlorophyll-A Concentration In Laguna De Bay Using Sentinel-3 Satellite Data." *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-4/W19, 125–132. DOI: 10.5194/isprs-archives-XLII-4-W19-125-2019, 2019.

INVITED/PLENARY TALKS

- Resource Speaker. "Data Storytelling and Visualization." A short course organized by Burger King Philippines, Perf Restaurants, Inc. January 10, 2024.
- Resource Speaker. "Data Storytelling and Visualization." A short course organized by Global Quality Management, Jollibee Worldwide Services. November 24-25, 2022.
- Resource Speaker. "Data Literacy in Contemporary Society: Engaging the Data Economy." *LIRMD It! One House, One Voice, One Mind: A Webinar on Data Literacy, Information Literacy, and Knowledge Management*. Organized by the Philippine House of Representatives. October 24, 2022.
- Resource Speaker. "Data Storytelling and Visualization." *29th National Quality Forum* (2018), organized by the Philippine Society for Quality. Okada Manila, Parañaque, Metro Manila.

GRANTS RECEIVED

- UP Research Dissemination Grant. In support of conference presentation at COMPSTAT 2022. University of the Philippines, Diliman. December 2022.

AFFILIATIONS / MEMBERSHIP

- Institute for Mathematical Statistics (IMStat), *since 2021*
- International Association for Statistical Computing (IASC), *since 2021*

LITERARY WORK

The following covers short stories, personal essays, poetry, and other literary work in English [ENG] and Filipino [FIL]. Unless otherwise specified, the following publications are solo productions under the name Dominic Daya. This list has been reduced to conserve space. A complete listing can be found on my website.

1. [ENG] "Vicious Animals," *Locked Down, Lit Up: An Anthology of Creative Writing in a Time of Quarantine*, to be published by the University of the Philippines Press, Eds. JV Ogatis and CC Sy Su. November, 2024.
2. [FIL] "Lila Ang Kulay Ng Paglisan," *Liwayway*. August, 2023.
3. [ENG] "Father You Have Sinned," *Young Blood: Philippine Daily Inquirer*, 2022.
4. [ENG] "Wednesday Girl," *Quarterly Literary Review Singapore*, 2021.
5. [FIL] "Mga Kalapating Papel," *Liwayway*, 2019. Recipient of the Gawad Rogelio Sibat, 1st place for the short story, 2016.
6. [ENG] "A Firsthand Account of the End of the World," *The Brasilia Review*, 2019. Recipient of the Amelia Lapeña-Bonifacio Literary Prize, 1st place for the short story, 2017.
7. [ENG] "A Flowchart for the Queen," *Quarterly Literary Review Singapore*, 2019.
8. [ENG] "My Youth's Soundtrack," *Young Blood 6*, 2017, Eds. RS De Vera, RA Garcellano, P Pastor, and JVD Rufino. Originally appeared as part of the *Young Blood* column of the *Philippine Daily Inquirer*, 2015.
9. [ENG] "Floyd and Meredith Forever", *The Brasilia Review*, 2015. Recipient (under the original title, "Photograph") of the Amelia Lapeña-Bonifacio Literary Prize, 2nd place for the short story, 2015.
10. [ENG] "An Amazona In Manila," *Philippine Daily Inquirer*, 2013. Awarded the same year, 2nd prize in the Philippine Daily Inquirer and Philippine Veterans Bank World War II True Stories Contest.

OTHER ARTICLES

Other technical and scientific articles published:

- "Maybe you shouldn't automate," *CodeX*, 19 July, 2021.
- "Demonstrating K-Means Clustering with a Minimal Javascript Applet," *Geek Culture*, 18 July, 2021.
- "Accessing Spotify's API Using R," *The Startup*, 25 May, 2020.

Mentions in other media:

- "Semiparametric Latent Topic Modeling (SemiparTM): A Promising Tool for Topic Modeling," by A. M. De Asis and G. Guanizo. *InFocus*, COARE. DOST-ASTI. 6 January, 2025.
- "433 na tumama ng jackpot sa Grand Lotto 6/55, nagkataon lang ba talaga?" *Balitambayan*, GMA News. 13 October 2022.

[This CV was last updated 8 May, 2025]