# FIRST NAME, LAST NAME: Lorenz Timothy Barco Ranera

**OFFICIAL DESIGNATION:** Assistant Professor 2

### **CONTACT INFORMATION**

- Office Address: Room 2125 Pavilion 2, Palma Hall, UP Diliman
- Personal Website: <u>https://www.linkedin.com/in/lbranera/</u>

### EDUCATION

#### BS Computer Science (Statistical Computing Track), cum laude, 2019

Department of Physical Sciences and Mathematics College of Arts and Sciences University of the Philippines Manila

#### MA History, 2023

Department of History College of Social Sciences and Mathematics University of the Philippines Diliman

### PROFILE

Lorenz Timothy Barco Ranera is an Assistant Professor at the Department of History, University of the Philippines Diliman. He was previously a faculty member of Mathematics and Computer Science at the Department of Physical Sciences and Mathematics, University of the Philippines Manila. He has a degree in BS Computer Science (2019) and MA History (2023). His research focuses on Philippine legal history (particularly development of marriage laws and criminal laws) and natural language processing (particularly NLP applications to legal corpora). He is also interested in pursuing the use of advanced statistics, modeling, and NLP methods, in writing historical narratives and social science research.

### **RESEARCH INTEREST**

Legal history, Natural language processing

# TEACHING

# TEACHING PORTFOLIO

#### COURSES TAUGHT IN UP SYSTEM:

#### Social Sciences and Philosophy Cluster:

• KASASAYAN 1: Kasaysayan ng Pilipinas

#### Mathematics, Science, and Technology Cluster:

- MATHEMATICS 10 (Math, Culture, and Society)
- Mathematics 11 (College Algebra)
- STS (Science, Technology and Society)
- Computer Science 11 (Introduction to Computer Science)
- Computer Science 21 (Fundamentals of Programming)

- Computer Science 121 (Web Programming)
- Computer Science 110 (Foundation of Biocomputing)
- Computer Science 135 (Computer Organization and Architecture)

### MENTORSHIP

#### UP Diliman (2024-Present)

Thesis Proposal Panel Member (*Un*)*Constitutional Authoritarianism: The 1971 Constitutional Convention and the 1973 Constitution, 1971- 1986* Wogie T. Pacala

#### UP Manila (2019-2024)

Co-adviser GIS-Based Spatial Accessibility Analysis of Radiation Therapy Center in Eastern Visayas, Philippines Jericho Joege G. Paler

Co-adviser *Topic Modelling Supreme Court Case Decisions using Latent Dirichlet Allocation* Bermylle John U. Razon

### **RESEARCH WORK**

## PUBLICATIONS

Jericho Joege G. Paler, **Lorenz Timothy Barco Ranera**, and Migel Antonio P. Catalig, "GIS-Based Spatial Accessibility Analysis of Radiation Therapy Center in Eastern Visayas, Philippines." In 2024 IEEE International Conference on E-health Networking, Application & Services (HealthCom), Nara, Japan, November 18-20, 2024, pp. 1-6. *IEEE*. https://ieeexplore.ieee.org/abstract/document/10880759

**Lorenz Timothy Barco Ranera,** "Pagbabalik-Tanaw sa Masalimuot na Ugnayang Tsino-Espanyol sa Pilipinas at Pag-iimahen sa mga Tsino noong ika-16-18 na dantaon," *Daluyan* 28, no. 2 (2022): 65-77. https://journals.upd.edu.ph/index.php/djwf/article/view/9620.

**Lorenz Timothy Barco Ranera**, "A Comparative Analysis and Evaluation of Natural Language Processing Document Embedding Techniques on Philippine Supreme Court Case Decisions." *Philippine Engineering Journal* 45, no. 2 (2024): 77-94. https://www.journals.upd.edu.ph/index.php/pej/article/view/9723

Bermylle John U. Razon, Geoffrey A. Solano, **Lorenz Timothy Barco Ranera**, "Topic Modelling Supreme Court Case Decisions using Latent Dirichlet Allocation." In 13<sup>th</sup> International Conference on Information and Communication Technology (ICTC), Ramada Plaza Hotel, Jeju Island, South Korea, October 19-21, 2022, pp. 284-289. *IEEE*. https://ieeexplore.ieee.org/abstract/document/9952945

**Lorenz Timothy Barco Ranera**, Geoffrey A. Solano, Nathaniel Oco, "Retrieval of Semantically Similar Philippine Supreme Court Case Decisions using Doc2Vec," 9<sup>th</sup> International Symposium on Multimedia and Communications (ISMAC), Seda Vertis North, Quezon City, Metro Manila, Philippines, August 19-21, 2019, pp. 1-6. *IEEE*. https://ieeexplore.ieee.org/abstract/document/8836165.

# CONFERENCES

#### Social Sciences and Philosophy Cluster:

**Lorenz Timothy Barco (speaker),** "The Writing of Philippine Legal History, 1950s-2010s," Philippine Historical Association Annual Conference, 19-20 Sept. 2024. University of the Philippines Los Baños, Los Baños, Laguna, Philippines.

**Lorenz Timothy Barco Ranera (speaker)**, "Divorce between the Empire and the Imperial: Divorce Redefined in the Evolving Philippine Legal System, 1898-1917," 4<sup>th</sup> Asian Legal History Conference, 25-26 July 2024. Hue City, Vietnam.

**Lorenz Timothy Barco Ranera (speaker)**, "Sex does not only involve the body, but it necessarily involves the mind as well': The Legal History of Sexual Consent in the Philippines," Association of Southeast Asian Studies (ASEAS-UK) Annual Conference 2023, 27-30 Nov. 2023. Via ZOOM.

**Lorenz Timothy Barco Ranera (co-speaker)** and Lian Maye C. Balagtas, "Tahanan Blueprint: A Preliminary Study on Filipino Housebuilding Beliefs, Practices, and Narratives," 45<sup>th</sup> UGAT International Conference (Anthropology of Home), November 9-11, 2023. Ateneo de Zamboanga University, Zamboanga City, Zamboanga, Philippines.

**Lorenz Timothy Barco Ranera (speaker)**, "Revolutionizing Marriage: Filipino Marriage during the Philippine Revolution, 1892-1901," 21<sup>st</sup> Philippine-Spanish Friendship Day Conference, October 12-13, 2023. Via ZOOM.

**Lorenz Timothy Barco Ranera (speaker)**, "Fostering Colonial Health Through Law: The Legal History and Foundations of Public Health Legislations in the Philippines, 1901-1935," 10<sup>th</sup> National Social Science Congress (NSSC X), July 27-29, 2023. Silliman University, Dumaguete City, Negros Oriental, Philippines.

**Lorenz Timothy Barco Ranera (speaker)**, "LDA Topic Modelling on Divorce-related Philippine Jurisprudence, 1902-1949," Dagitab 1<sup>st</sup> Philippine National Conference on Digital Humanities, November 3-5, 2021. Via ZOOM.

#### Mathematics, Science, and Technology Cluster:

Louis Bryan B. Ranera, Glaezel Angelique T. Barredo, Riaflor M. Alcabedos, **Lorenz Timothy Barco Ranera (co-author)**, "Primer Design, Optimization, and Validation for the Detection of Sirtuin Gene in Lactiplantibacillus plantarum Strains and Bioinformatic Analysis of Putative Sirtuin-Positive Lactic Acid Bacterial Strains," 51<sup>st</sup> PSBMB Annual Convention, 26-28 November 2024. Marison Hotel, Legazpi City, Albay.

Jericho Joege G. Paler, **Lorenz Timothy Barco Ranera (co-author)**, and Migel Antonio P. Catalig, "GIS-Based Spatial Accessibility Analysis of Radiation Therapy Center in Eastern Visayas, Philippines." In 2024 IEEE International Conference on E-health Networking, Application & Services (HealthCom), Nara, Japan, November 18-20, 2024, pp. 1-6. IEEE. https://ieeexplore.ieee.org/abstract/document/10880759

Bermylle John U. Razon, Geoffrey A. Solano, **Lorenz Timothy Barco Ranera (co-author)**, "Topic Modelling Supreme Court Case Decisions using Latent Dirichlet Allocation," 13<sup>th</sup> International Conference on Information and Communication Technology (ICTC), 19-21 October 2022. Ramada Plaza Hotel, Jeju Island, South Korea.

**Lorenz Timothy Barco Ranera (speaker)**, Geoffrey A. Solano, Nathaniel Oco, "Retrieval of Semantically Similar Philippine Supreme Court Case Decisions using Doc2Vec," 9<sup>th</sup> International Symposium on Multimedia and Communications (ISMAC), 19-21 August 2019. Seda Vertis North, Quezon City, Metro Manila, Philippines.

## **RESEARCH AWARDS**

Best Paper Award (one of 13 awardees), "Redefining the Crime of Rape in the Post-War Philippines, A Legal History," Hong Kong Baptist University Research Postgraduate Students Research Forum 2024, May 22, 2024. Via ZOOM.

Best Special Problem Award for BS Computer Science, "Similar Philippine Supreme Court Case Decisions Retrieval System Using Doc2Vec," June 2019.

### PUBLIC SERVICE AND EXTENSION SERVICE TO THE DISCIPLINE

#### Participant

Philippine Historical Association (PHA) Annual Conference KASAYSAYAN NG KASAYSAYAN: Mga Historiograpiya ng Kasaysayang Pilipino Mula 1955, 19-21 September 2024, University of the Philippines Los Baños, Los Baños, Laguna, Philippines.

#### Language Editor

Araling Panlipunan Curriculum of Department of Education Bureau of Curriculum Development, August 23, 2022. Department of Education Pasig Division Office.

### SERVICE TO THE UNIVERSITY

**Head** Department Registration Committee

**Member** Department Quality Assurance Team

Member Department Website Team

#### Event Host

From Periphery to Plate: Filipino Cuisine, National Identity, and the Quest for Global Recognition, 24 February 2024, Silid Balatik, Pavilion 2, Palma Hall, UP Diliman.

Almá /Alma: Mga Lektura para sa Seskwisentenaryo ni Rafael V. Palma (1874–1939), 29 October 2024, Pilar Herrera Hall, Palma Hall, UP Diliman.

22nd Philippine-Spanish Friendship Day International Conference, 10-11 October 2024, Pilar Herrera Hall, Palma Hall, UP Diliman.

When 'Lives Were as Cheap as Chickens': Dark Histories of the Barrio during the Japanese Occupation of the Philippines, 1942-1945, 26 September 2024, Palma Hall 207, Palma Hall, UP Diliman

Book Talk: Emplacing East Timor: Regime Change and Knowledge Production, 1860-2010, 27 August 2024, Pilar Herrera Hall, Palma Hall, UP Diliman.