

EDUCATION

- **University of California, Berkeley** Berkeley, CA
Ph.D. in Civil and Environmental Engineering (Systems Engineering), Expected: August 2024 *Jan. 2019 – present*
- **Mapúa University** Manila, Philippines
Master of Science in Civil Engineering (Transportation Engineering) *Oct. 2013 – July 2016*
- **Southern Luzon State University** Quezon, Philippines
Bachelor of Science in Civil Engineering (cum laude) *May. 2007 – Mar. 2012*

EXPERIENCE

- **University of California, Berkeley** Berkeley, CA
Graduate Student Instructor (GSI) & Reader *Aug. 2019 - present*
 - **GSI for CE C263H/CP C257H - Human Mobility and Network Science:** Fall 2023 semester
 - **GSI for PHYSICS 8A - Introductory Physics:** Summer Term 2023
 - **GSI for CE 295 - Data Science for Energy:** Spring 2023, Fall 2021 semesters
 - **GSI for CE 263N - Scalable Spatial Analytics/CP 257 - Data Science for Human Mobility and Socio-technical Systems:** Fall 2022 semester
 - **GSI for CE 259 - Public Transportation Systems:** Spring 2022 semester
 - **GSI for CE C88/CP C88 - Data Science for Smart Cities:** Spring 2021 semester
 - **Reader for IE 242 - Applications in Data Analysis:** Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021 semesters
- **Lawrence Berkeley National Lab** Berkeley, CA
Affiliate: Energy Technologies Area - Energy Analysis and Environmental Impacts Division *Sept. 2020 - Aug. 2022*
- **Mapúa University** Manila, Philippines
Teaching Instructor *Oct 2016 - January 2019*
 - **Faculty Member, School of Civil, Environmental, and Geological Engineering:** Taught undergraduate courses in Methods of Research, Transportation Engineering, Engineering Economy, etc.; Supervised undergraduate theses
 - **Program Chair, Construction Engineering Management:** Acted as the faculty adviser to the students of both the bachelor's and master's degree in Construction Engineering and Management; Performed administrative tasks for the program such as planning for the course offerings and assigning the teaching load to the faculty
 - **Faculty Adviser, Transportation Science Society of the Philippines Mapúa Student Chapter (2016-2018):** Helped the executive committee on planning for activities; Gave advice to the student members of the organization
 - **Research Coordinator for the School of Civil, Environmental, and Geological Engineering (October-December 2016):** Headed the planning for research agenda of the school.
- **Mapúa Institute of Technology (now Mapúa University)** Manila, Philippines
Researcher *June 2013 - May 2017*
 - **Senior Science Research Specialist (September 2016-May 2017):** Reported directly to the Chief Science Research Specialist and Project Leader with regards to the policies and administration of the Department of Science & Technology (DOST)-funded research project - Mapúa Phil-LiDAR 1 (Flood Hazards Modelling for the Provinces of Cavite, Batangas, Rizal and Quezon); Organized culminating activities for the project such as the mentoring sessions with the local government units and the maps turnover ceremony
 - **Research Associate (June 2013-August 2016):** Worked full time as a geographic information system (GIS) specialist with the main task of finalizing the terrain models from the pre-processed light detection and ranging (LiDAR) data
- **Southern Luzon State University** Quezon, Philippines
Contract of Service Instructor *June 2013 - April 2014*
 - **Undergraduate Instructor at the College of Engineering - Department of Civil Engineering:** Taught undergraduate courses in traffic engineering, soil mechanics, and fluid mechanics

PUBLICATIONS/CONFERENCE PAPERS

- **Theophile CABANNES, Alben BAGABALDO, Junghwan LEE, Qianxin GAN, Ayush JAIN, Alice BLONDEL, Alexandre BAYEN (2023). Creating, Calibrating, and Validating Large-Scale Microscopic Traffic Simulation:** Transportation Research Board 102nd Annual Meeting (TRBAM-23-02502) <https://trid.trb.org/view/2087449>
- **Alben BAGABALDO, Marta GONZALEZ (2022). Predicting Traffic Flow on Faulty Traffic Detectors Using Machine Learning Techniques:** Proceedings of the International Conference on Transportation and Development 2022 <https://doi.org/10.1061/9780784484319.019>
- **Fang-Chieh CHOU, Alben BAGABALDO, Alexandre BAYEN (2022). The Lord of the Ring Road: A review and evaluation of autonomous control policies for traffic in a ring road:** ACM Transactions on Cyber-Physical Systems, Vol. 6 Issue 1 <https://doi.org/10.1145/3494577>
- **Alben BAGABALDO, Jeralou ANOSA, Jeremy GAPUSAN, Kevin SORIANO, Francis UY, Riches BACERO (2017). Determining the Potential Effects of the Proposed Removal of South Provincial Buses along Epifanio de los Santos Avenue (EDSA) using Commuters' Perception:** Journal of the Eastern Asia Society for Transportation Studies, Volume 12 Pages 489-504 <https://doi.org/10.11175/easts.12.489>
- **Alben BAGABALDO, Francis UY (2016). Determination of Barriers towards Addressing Mobility and Accessibility through Traffic Simulation: the Case of Intramuros, Manila:** Japan Society of Civil Engineers 18th International Summer Symposium, Page 71-72
- **Alben BAGABALDO, Francis UY, Noriel Christopher TIGLAO (2016). Modeling Impacts of Proposed Mobility and Accessibility Interventions in Intramuros, Manila:** Proceedings of the 23rd Annual Conference of the Transportation Science Society of the Philippines

SELECTED SPEAKING ENGAGEMENT/TALKS

- **(Media) CNN Philippines: The Service Road by James Deakin:** Modeling Cities through Satellite Images (10-min Studio Interview), Airing date: May 31, 2017
- **Mapa Phil-LiDAR 1 Maps Turnover Ceremony:** Big Data, The Bayleaf Hotel, Intramuros, Manila, March 16, 2017
- **Transportation Summit Mapa Institute of Technology (TransMIT) 2017:** Geospatial Information and Civil Systems for a Sustainable and Inclusive Transportation, Mapua Institute of Technology, Manila, March 2, 2017
- **Intelligent Transportation Systems (ITS) Forum:** An event by the De La Salle University-Manila co-presented by the Transportation Science Society of the Philippines), De La Salle University, Manila, February 17, 2017

AWARDS/FELLOWSHIPS

- **Commission on Higher Education - Philippine California Advanced Research Institutes Ph.D. Overseas Scholarship (January 2019-December 2023):** Recipient of a three-year fellowship funded by the Philippine government to study Ph.D. at UC Berkeley; this scholarship covers both full tuition, other fees related to the program, and the daily living expenses
- **Dean's Council Scholarship:** Recipient of the Dean's Council Scholarship as a student of Master of Science in Civil Engineering at Mapúa Institute of Technology; the scholarship covered one year of full tuition
- **2016 Japan Society of Civil Engineers (JSCE) Study Tour Grant:** This is a unique one-week program for young civil engineers to learn Japanese civil engineering technology and projects. Recipients are selected by JSCE among the nominees of each participating country where they are also asked to present about their research at the International Summer Symposium.
- **2016 Young Future Energy Leaders at Masdar Institute (now, Khalifa University):** An outreach initiative of Masdar Institute of Science and Technology, is a key element of the annual World Future Energy Summit (WFES) that is held in Abu Dhabi. YFEL focuses on raising the awareness of students and young professionals in the fields of renewable energy and sustainability.

PROGRAMMING SKILLS

- **Languages:** Matlab, Python, R, \LaTeX

LANGUAGES

- **Languages:** English (Advanced proficiency level), Filipino/Tagalog (Native language)