# Briane Paul V. Samson, PhD

Chair and Associate Professor, Department of Software Technology Head, Center for Complexity and Emerging Technologies Deputy Director, Dr. Andrew L. Tan Data Science Institute De La Salle University briane.samson@dlsu.edu.ph brianepauls@acm.org https://brianesamson.com

### RESEARCH INTERESTS

My research focuses on the integration of human-computer interaction and complex systems research in developing civic media and technologies that promotes prosocial behavior. I develop human-centered and interactive technologies that are designed to improve one's personal productivity and well-being, and to assess and manage urban mobility, transportation services, and disaster preparedness and response. At the same time, I investigate the underlying and complex dynamics of sociotechnical systems (e.g. crowds, social networks), especially with the introduction of technological solutions. Currently, I'm focused on rethinking navigation applications as a civic technology that encourages drivers to follow unselfish routes, which could help them develop sustainable mobility patterns.

### ACADEMIC BACKGROUND

2017 – 2020	Doctor of Systems Information Science Future University Hakodate, Japan
2009 – 2013	Master of Science in Computer Science De La Salle University, Philippines
2006 – 2009	Bachelor of Science in Computer Science with specialization in Software Technology  De La Salle University, Philippines (Magna Cum Laude)

#### FELLOWSHIPS, GRANTS, AWARDS

2022	Junior Associate
	The Abdus Salam International Centre for Theoretical Physics
2022	Science Communication Fellow
	DOST-PCIEERD Science Communication Fellowship Program
2020	Scholarships for Events on Complex Systems (SECS)
2020	Heidelberg Laureate Forum 2020 Young Researcher
2019	#VizRisk 2019 Challenge Grand Prize and Best Interaction Design Award
	World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR)
2019	IPSJ SIGUBI Travel Grant for CHI 2019 in Glasgow, Scotland UK
2017	Japanese Government Scholarship (PhD)
	Future University Hakodate, Sep 2017 – Sep 2020
2017	Best Paper Honorable Mention
	Philippine Computing Science Congress 2017
2016	Best Paper – Sustainability, Environment, and Energy
	DLSU Research Congress 2016
2013	Best Research Optimization Application
	Smart-IRRI Bigas2Hack Hackathon

## PEER-REVIEWED PUBLICATIONS

- P24 Richard Lance Parayno, Janna Aika Deja, Tyrone Justin Sta Maria, **Briane Paul V. Samson**, and Jordan Aiko Deja. 2023. Good Day Manager! Exploring Social Relationships in NFT-based Play-to-Earn Games. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23), April 23–28, 2023, Hamburg, Germany. ACM, New York, NY, USA, 11 pages. https://doi.org/10.1145/3544548.3580713
- P23 Minot, J. R., Trujillo, M. Z., Rosenblatt, S. F., Jáuregui, G. D. A., Moog, E., **Samson, B. P. V.**, Hébert-Dufresne, L., & Roth, A. M. (2022). Distinguishing In-Groups and Onlookers by Language Use. In Proceedings of the 12th Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis, May 26, 2022, Dublin, Ireland.
- P22 Trujillo, M. Z., Rosenblatt, S. F., Jáuregui, G. D. A., Moog, E., **Samson, B. P. V.**, Hébert-Dufresne, L., & Roth, A. M. (2021). When the Echo Chamber Shatters: Examining the Use of Community-Specific Language Post-Subreddit Ban. In Proceedings of the Fifth Workshop on Online Abuse and Harms, August 1-6, 2021, Bangkok, Thailand.
- P21 Manzano, J., Soliven, A.F., Llamas, A.M., Tinsay, S.M., Samson, B.P.V., & Cabredo, R. (2021). Using Boolean Satisfiability Solvers to Help Reduce Cognitive Load and Improve Decision Making when Creating Common Academic Schedules. In CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2021), May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 10 pages.
- P20 Lao, A.R., Chua, U.C., & **Samson, B.P.V.** (2020). Analysis of the co-authorship network of Filipino researchers in deep learning. Philippine Science Letters, 13(2), 148–157.
- P19 Samson, B.P.V. & Sumi, Y. (2020). Are Two Heads Better than One? Exploring Two-Party Conversations for Car Navigation Voice Guidance. In CHI Conference Extended Abstracts on Human Factors in Computing Systems Proceedings (CHI 2020), April 25–30, 2020, Honolulu, Hawai'i, USA. ACM, New York, NY, USA, 10 pages.
- P18 Chua, U.C., Santiago, K.L., Ona, I.B.M., Peña, R.M.N., Marasigan, G.Z.S., Delos Reyes, P.G.A. & Samson, B.P.V. (2020). From Access to Effective Use: Open Data Portals for Everyday Citizens. In Proceedings of the 2020 Symposium on Emerging Research from Asia and on Asian Contexts and Cultures (AsianCHI '20), April 25, 2020, Honolulu, Hawai'i, USA. Association for Computing Machinery, New York, NY, USA, 61–64.
- P17 Feria, J.M.A.M., Oliva, M.L.S., **Samson, B.P.V.** & Lao, A.R. (2019). Drowning Out Rumor: Dynamical Models of the Interaction between Spreaders of and Exposed to Truth and Rumor Spreading. Philippine Journal of Science, 148(4), 659–687.
- P16 Samson, B.P.V. & Sumi, Y. (2019). Exploring Factors that Influence Connected Drivers to (Not) Use or Follow Recommended Routes. In CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019), May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, 14 pages.
- P15 **Samson, B.P.V.**, Velez, G.A.T., Nobleza, J.R., Sanchez, D., & Milan, J.T. (2018). Optimizing the Efficiency, Vulnerability and Robustness of Road-based Para-transit Networks using Genetic Algorithm. In: Shi Y. et al. (eds) Computational Science ICCS 2018. ICCS 2018. Lecture Notes in Computer Science, vol 10860. Springer, Cham.
- P14 Constantino K.P., Gonzales E.J., Lazaro L.M., Serrano E.C., **Samson B.P.V.** (2018) Towards an Automated Plant Height Measurement and Tiller Segmentation of Rice Crops using Image

- Processing. In: Billingsley J., Brett P. (eds) Mechatronics and Machine Vision in Practice 3. Springer, Cham.
- P13 Buzon R.J.C., Dumlao L.T.D., Mangubat M.A.C., Villarosa J.R.D., & Samson B.P.V. (2018) Towards an Automated, High-Throughput Identification of the Greenness and Biomass of Rice Crops. In: Billingsley J., Brett P. (eds) Mechatronics and Machine Vision in Practice 3. Springer, Cham.
- P12 Fernandez, R.A., Deja, J.A., & **Samson, B.P.V.** (2018). Automating Heuristic Evaluation of Websites Using Convolutional Neural Networks. In Asian HCl Symposium'18 Proceedings of the Asian HCl Symposium'18 on Emerging Research Collection, 2018.
- P11 Samson, B.P.V., & Sumi, Y. (2018). Taxi Dash: Serendipitous Discovery of Taxi Carpool Riders. In: Murao K., Ohmura R., Inoue S., Gotoh Y. (eds) Mobile Computing, Applications, and Services. MobiCASE 2018. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 240. Springer, Cham
- P10 Samson, B.P.V., Aldanese IV, C., Chan, D.M., San Pascual, J.J., & Sido, M.V.A. (2017). Crowd Dynamics and Control in High-Volume Metro Rail Stations. Procedia Computer Science, Volume 108, 2017, pages 195-204.
- P9 **Samson, B.P.V.**, Marcaida, C.M., Gervasio, E.A., Militar, R., & Ibanez, J. (2017). Analyzing Congestion Dynamics in Mass Rapid Transit using Agent-Based Modeling. In *Proceedings of the 17<sup>th</sup> Philippine Computing Science Congress*.
- P8 Marcos, N., Largoza, G., **Samson, B.P.V.**, Base, J.J., Calulo, L.P., Co, B. & Lo C. (2016). A Web-based CBMS Dataset Visualization and Simulation Tool. In *Proceedings of the DLSU Research Congress 2016*.
- P7 Collantes, M., Hipe, M., Sorilla, J., Tolentino, L. & **Samson, B.P.V.** (2015). Simpatico: A Text Simplification System for Senate and House Bills. In *Proceedings of the 11<sup>th</sup> National Natural Language Processing Research Symposium*.
- P6 Constantino, P., Gonzales, E., Lazaro, L., Serrano, C. & **Samson, B.P.V.** (2015). Plant Height Measurement and Tiller Segmentation of Rice Crops Using Image Processing. In *Proceedings* of the DLSU Research Congress 2015.
- P5 Buzon, R., Dumlao, L., Mangubat, M., Villarosa, J. & **Samson, B.P.V.** (2015). Luntian: An Automated, High-throughput Phenotyping System for the Greenness and Biomass of C4 Rice. In *Proceedings of the DLSU Research Congress 2015*.
- P4 Samson, B. P.V. & Ong, E. (2014). Extracting Conceptual Relations from Children's Stories. In: Kim Y.S., Kang B.H., Richards D. (eds) *Knowledge Management and Acquisition for Smart Systems and Services*. LNCS 8863 (195-208). Switzerland: Springer International Publishing.
- P3 Marcos, N., Largoza, G., **Samson, B.P.V.**, Base, J.J., Calulo, L.P., Co, B. & Lo C. (2014). Design Considerations for a Visualization and Simulation Tool for CBMS Data. In *Proceedings of the DLSU Research Congress 2014*.
- P2 Chua, N., Lai, F., Mondejar, J., **Samson, B.P.V.**, & Tan, K. (2009). Generalized Distributed Garbage Collection. In *Proceedings of the 10<sup>th</sup> Philippine Computing Science Congress*.
- P1 **Samson, B.P.V.**, Alcera, B., Go, E., Gonzales, C. & Lim, N. (2009). An Automated Thematic Role Labeler and Generalizer for Filipino Verb Arguments. In *Proceedings of the 23<sup>rd</sup> Pacific*

Asia Conference on Language, Information and Computation (501-510). Hong Kong: City University of Hong Kong Press.

### EXTERNALLY FUNDED PROJECTS

Jun 2022 – Mar 2023 Disinformation Risk Assessment: The Philippines Country Report

**Project Coordinator** 

Funding: Global Disinformation Index

Mar 2021 – Mar 2023 Diachronic Representation and Linguistic Study of Filipino Word Senses

Across Social and Digital Media Contexts

Project Leader

Funding: DOST-CRADLE Program

2021 - 2023 System for Optimized Routing for Transport (SORT)

System Development Lead for Modeling and Simulation

Funding: DOST

Dec 2020 – Apr 2022 Climate Vulnerability and Risk Information System for Oriental Mindoro

Senior Data Analyst

Funding: Global Green Growth Institute

2018 - 2021 Development and Application of Transport Desirability Index for the

Assessment and Planning of Transport Systems in the Philippines

System Developer Lead

Funding: CHED

#### PROFESSIONAL EXPERIENCE

Oct 2021 – Present Chair, Department of Software Technology, De La Salle University

Leads the department operations and faculty development. Manages the BS Computer Science major in Software Technology, MS/PHD in Computer Science, and BS Interactive Entertainment programs and facilitates a vibrant learning

environment for improved student outcomes.

Sep 2022 – Present Head, Center for Complexity and Emerging Technologies, De La Salle University

Manages the daily operations, membership, research groups and research projects.

Jul 2021 – Present Deputy Director, Dr. Andrew L. Tan Data Science Institute, De La Salle University

Directs and manages the different research programs undertaken by the institute

and directs the forthcoming PhD program.

Oct 2021 – Present Associate Professor, College of Computer Studies, De La Salle University

Teaches Human-Computer Interaction, Research Methods, Software Engineering, Data Science, and Complex Systems. Conducts research on understanding and modeling complex adaptive systems through agent-based modeling, data science, and network science. Focuses on cities, mobility, social networks, and disaster management. Also does research on human-computer interaction in vehicles and

navigation.

Aug 2017 – Aug 2022 Head, Civic Services Group, Center for Complexity and Emerging Technologies, De

La Salle University

Manages the civic computing projects.

May 2013 – Oct 2021 Assistant Professor, College of Computer Studies, De La Salle University

Teaches Human-Computer Interaction, Software Design Patterns, Software Engineering, and Complex Systems. Conducts research on understanding and modeling complex adaptive systems through agent-based modeling, data science, and network science. Focuses on cities, mobility, social networks, and disaster management. Also does research on human-computer interaction in vehicles and

navigation.

Jan 2014 – Aug 2017 Head, Center for Complexity and Emerging Technologies, De La Salle University

Manages the daily operations, membership, research groups and research projects.

Dec 2013 – Aug 2017 Practicum Coordinator, Software Technology Department, De La Salle University

Orients the students and manages the implementation and logistics of the department's practicum program. Liaises with the industry partners during

deployment.

Dec 2012 – May 2013 Research Assistant, De La Salle University

Implemented a mobile application to aid the data gathering regularly conducted by

Angelo King Institute - Community Based Monitoring System.

Oct 2010 - Sept 2012 Associate Consultant, Microsoft Solutions, Dimension Data Asia Pacific Pte. Ltd.

Designed and deployed Microsoft technology solutions across the Asia Pacific

region.

Sept 2009 – Oct 2010 Researcher & Project Implementor, Datacraft Asia Pte. Ltd.

Simulated an Active Directory infrastructure and implemented Microsoft technologies. Did Tier-2 and Tier-3 technical support to Datacraft's Microsoft

consulting community.

## **ORGANIZATIONS & COMMUNITIES**

**Co-Founder** Databeers Manila

Manila ACM SIGCHI Chapter

Membership Chair Manila ACM SIGCHI Chapter

Campus Advisor GitHub Education

Faculty Sponsor DLSU ACM Student Chapter

UX Society - Taft

Member Association for Computing Machinery

ACM Special Interest Group on Computer-Human Interaction

ACM Special Interest Group on Knowledge Discovery and Data Mining

Interaction Design Foundation
Data Visualization Society

Information Processing Society of Japan

IPSJ Special Interest Group on Ubiquitous Computing

Complex Systems Society Network Science Society

Society of Young Network Scientists

# ACADEMIC SERVICES

MemberAsian SIGCHI Committee 2022-2023General ChairAsian CHI Symposium 2020-2021

Assistant to the Papers Chair CHI 2019-2020

Associate Chair CHI 2021-2023, CSCW 2021-2023, AutoUI 2021-2022, CHI 2020-2021 Late-

Breaking Works (LBW) Track

Organizing Committee MobileHCI 2022 (Social Media Co-Chair)

Program Committee WebSci 2022-2023, IEEE DSAA 2022 CSSCS

Reviewer – Journal Cities, Computers and Electronics in Agriculture, Philippine Journal of Science,

Transportation Planning and Technology

**Reviewer – Conference** PCSC 2022, AutoUI 2019-2020, ISS 2019, CSCW 2019-2020, VIS 2019,

ICMI 2019-2020, ICMI 2022, MobileHCI 2019-2020, DIS 2020, ISS 2019, Asian CHI Symposium 2019-2021, IndiaHCI 2020, CHIuXiD 2019, National Natural

Language Processing Research Symposium (NNLPRS) 2015-2018

## SCHOOLS & CONFERENCES

Nov 2022	Pista ng Mapa 2022 Conference, Legazpi City, Albay, Philippines
Nov 2022	International Conference on IT in Education 2022, Davao City, Philippines
Oct 2022	36 <sup>th</sup> Pacific Asia Conference on Language, Information and Computation, Virtual
Nov 2021	34th IEEE/ACM International Conference on Automated Software Engineering, Virtual
Nov 2021	Pista ng Mapa 2021 Conference, Virtual
Sep 2021	Digital 8th Heidelberg Laureate Forum, Virtual
July 2021	First Social ComQuant Summer School, Virtual
July 2021	ACM SIGCAS Conference on Computing and Sustainable Societies 2021, Virtual
July 2021	ACM In-cooperation Conversational User Interfaces Conference 2021, Virtual
July 2021	Networks 2021: A Joint Sunbelt and NetSci Conference, Virtual
May 2021	AAAI International Conference on Web and Social Media 2021, Virtual
May 2021	ACM CHI Conference on Human Factors in Computing Systems 2021, Virtual
May 2021	ACM CHI Symposium 2021, Virtual
March 2021	Northeast Regional Conference on Complex Systems 2021, Virtual
January 2021	2021 Complex Networks Winter Workshop, Virtual

October 2020	IEEE VIS 2020, Virtual
October 2020	ACM Conference on Computer-Supported Collaborative Work and Social Computing 2020, Virtual
September 2020	Heidelberg Laureate Forum 2020, Virtual
September 2020	ACM International Joint Conference on Pervasive and Ubiquitous Computing 2020, Virtual
April 2020	Northeast Regional Conference on Complex Systems 2020, Virtual
April 2020	Asian CHI Symposium 2020, Honolulu, Hawaii, USA (Virtual)
January 2020	NetSciX 2020: International School and Conference on Network Science, Tokyo, Japan
December 2019	ACM CSCW Asia Winter School 2019, Kyoto, Japan
May 2019	ACM CHI Conference on Human Factors in Computing Systems 2019, SEC Campus, Glasgow, Scotland UK
May 2019	Asian CHI Symposium 2019, SEC Campus, Glasgow, Scotland UK
March 2019	Interaction 2019, National Institute for Informatics, Tokyo, Japan
June 2018	International Conference on Computational Science 2018, Wuxi, China
April 2018	ACM CHI Conference on Human Factors in Computing Systems 2018, Palais des Congrès de Montréal, Montreal, Canada
April 2018	Asian CHI Symposium 2018, Palais des Congrès de Montréal, Montreal, Canada
March 2018	Interaction 2018, National Institute for Informatics, Tokyo, Japan
February 2018	MobiCASE 2018: 19 <sup>th</sup> EAI International Conference on Mobile Computing, Applications and Services, Ritsumeikan University Osaka Ibaraki Campus, Japan
September 2017	Workshop on Computation: Theory and Practice 2017, Osaka University Nakanoshima Center, Japan
June 2017	International Conference on Computational Science 2017, ETH Zurich, Switzerland
March 2017	17 <sup>th</sup> Philippine Computing Science Congress, University of San Carlos, Cebu City, Philippines
March 2017	NTU Winter School 2017 on Complexity Science, Nanyang Technological University, Singapore
March 2016	NTU-Warwick Winter School 2016 on Complexity Science, Nanyang Technological University, Singapore

July 2015	21 <sup>st</sup> International Conference on Mechatronics and Machine Vision in Practice, De
	La Salle University

April 2015 11<sup>TH</sup> National Natural Language Research Symposium, National University

March 2015 DLSU Research Congress 2015, De La Salle University

December 2014 Pacific Rim Knowledge Acquisition Workshop 2014, Gold Coast, Australia

March 2014 DLSU Research Congress 2014, De La Salle University

November 2013 Form, Function and Class Conference 2013, De La Salle – College of St. Benilde

June 2012 Echelon 2012, National University of Singapore, Singapore

December 2009 23rd Pacific Asia Conference on Language, Information and Computation, City

University of Hong Kong, Hong Kong

September 2009 6<sup>TH</sup> National Natural Language Research Symposium, De La Salle University