

Briane Paul V. Samson, PhD

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Center for Complexity and Emerging Technologies
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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

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| 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 (<i>Magna Cum Laude</i>) |

GRANTS AND AWARDS

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| 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

- P22 (In press) 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., Dumlaio 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 HCI Symposium'18 Proceedings of the Asian HCI 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 17th 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 11th 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 10th 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 23rd Pacific Asia Conference on Language, Information and Computation* (501-510). Hong Kong: City University of Hong Kong Press.

EXTERNALLY FUNDED PROJECTS

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

Jul 2021 – Present

Research Director, Dr. Andrew L. Tan Data Science Institute, De La Salle University

Directs and manages the different research programs undertaken by the institute.

Directs the forthcoming PhD program.

May 2013 – Present

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.

Aug 2017 – Present

Head, Civic Services Group, Center for Complexity and Emerging Technologies, De La Salle University

Manages the civic computing projects.

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
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

General Chair	Asian CHI Symposium 2020-2021
Assistant to the Papers Chair	CHI 2019-2020
Associate Chair	CHI 2021-2022, CSCW 2021-2022, AutoUI 2021, CHI 2020-2021 Late-Breaking Works (LBW) Track
Organizing Committee	MobileHCI 2022 (Social Media Co-Chair)
Reviewer – Journal	Cities, Computers and Electronics in Agriculture
Reviewer – Conference	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, CHluXiD 2019, National Natural Language Processing Research Symposium (NNLPRS) 2015-2018

SCHOOLS & CONFERENCES

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 (<i>Virtual</i>)
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: 19th 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	17th 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 **21st International Conference on Mechatronics and Machine Vision in Practice**, De La Salle University

April 2015 **11TH 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 **6TH National Natural Language Research Symposium**, De La Salle University