Briane Paul V. Samson

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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

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*)

GRANTS AND AWARDS

2020	**Heidelberg Laureate Forum Young Researcher** Heidelberg Laureate Forum 2020
2019	**#VizRisk 2019 Challenge Grand Prize Winner** **#VizRisk 2019 Challenge Best Interaction Design Award Winner** 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

P21 (*forthcoming*) 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 Extended Abstracts 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 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.

PROFESSIONAL EXPERIENCE

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.**
	Worked as researcher and developer. 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

Assistant to the Papers Chair	CHI 2019-2020
General Chair	Asian CHI Symposium 2020-2021
Associate Chair	CHI 2021, CSCW 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, MobileHCI 2019-2020, DIS 2020, ISS 2019, Asian CHI Symposium 2019-2020, IndiaHCI 2020, CHIuXiD 2019, National Natural Language Processing Research Symposium (NNLPRS) 2015-2018

▌SCHOOLS & CONFERENCES

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: 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