

Yasmin Bhattacharya, Ph.D

Research faculty -Social Safety Systems, Institute of Industrial Science, University of Tokyo

Adjunct faculty -SERD, Asian Institute of Technology (AIT)

Researcher -Crisis and Environment Management Policy Institute (CeMI)

PERSONAL & CONTACT INFORMATION	DOB: 20 April 1988; Sex: Female; Nationality: New Zealand Insitute of Industrial Science, University of Tokyo, Japan. yasmin.bha@gmail.com; yasmin@iis.u-tokyo.ac.jp; yasmin@ait.asia
RESEARCH INTERESTS	Spatial modeling and analysis; agent-based modeling of disaster recovery; data-science and GIS oriented approaches for urban planning; mathematical modelling of land use management; system dynamics.
EDUCATION	<p>Ph.D., Urban Engineering, 2012-2015 The University of Tokyo, Japan</p> <ul style="list-style-type: none">Dissertation: <i>Analyzing Post-disaster Recovery Phenomena through the Design and Development of an Agent-based Recovery Simulation Model: A New Approach towards Re-thinking Disaster Recovery Mechanisms.</i> <p>M.Arch (research), Architecture, 2010-2013 Victoria University of Wellington, New Zealand</p> <ul style="list-style-type: none">Thesis: <i>Integrating Passive Thermal Comfort Features with Seismic Retrofitting Techniques for Non-Engineered Housing in India.</i> <p>BA Honors year (First Class Honours), Architecture; Japanese, 2010-2011 Victoria University of Wellington, New Zealand</p> <ul style="list-style-type: none">Thesis (Architecture): <i>Housing and its influence on Community Recovery –the case of 1995 Hanshin-awaji earthquake aftermath</i>Thesis (Japanese): <i>Sound and Spatial Experience –Japanese Aural Architecture</i>(thesis written in Japanese). <p>Short-term Graduate Program Architecture Intensive Summer Program, 2009 University of California Berkeley, U.S.A.</p> <p>Bachelor of Arts (BA), Computer Science; Japanese (double major), 2006-2009 Massey University, New Zealand; University of California Los Angeles, U.S.A.</p>
WORK EXPERIENCE	<p>Research Faculty (Project Research) 2023 - Institute of Industrial Science (IIS), University of Tokyo, Japan</p> <p>Adjunct Faculty 2021 - Urban Innovation and Sustainability (UIS) Program, School of Environment, Resource and Development (SERD), Asian Institute of Technology (AIT), Thailand</p> <p>Researcher 2023 - Research Division for Disaster Mitigation and Environmental Studies, Crisis and Environment Management Policy Institute (CeMI), Japan</p> <p>Associate Professor 2022 - 2023 Department of Planning, Architecture and Environmental Systems, School of Systems Engineering and Science Shibaura Institute of Technology (SIT), Japan</p> <p>Research Fellow 2022 - 2023 Institute of Industrial Science (IIS), University of Tokyo, Japan</p> <p>Assistant Professor 2018 - 2021 Department of Planning, Architecture and Environmental Systems, Shibaura Institute of Technology, Japan</p> <p>Associate Research Fellow 2018 - 2021</p>

Institute of Industrial Science (IIS), University of Tokyo, Japan
Postdoctoral Researcher 2015 - 2018
 Institute of Industrial Science, University of Tokyo, Japan
Research Assistant; Teaching Assistant 2013 - 2015
 Department of Urban Engineering, University of Tokyo.
Urban Futures Intern 2012
 UNU-IAS (United Nations University - Institute of Advanced Studies)
Research Assistant 2008
 Department of Architecture and Urban Design, University of California Los Angeles (UCLA), U.S.A.
Developed the Psychrometric Chart Tutorial program (for better understanding of energy concepts). Accessible at: <http://www2.aud.ucla.edu/energy-design-tools/> (Won the Student Best Paper Award Runner-up and Society of Building Science Educators' Travel grant for this at the American Solar Energy Society Conf., 2009)

TEACHING
EXPERIENCE

Undergraduate Courses

- Spatial Modeling and Analysis (designed; sole instructor)
(Course No. R1231606, SIT)
- Studio:Environmental Land Use Planning (sole instructor)
(Course No. R1231603, SIT)
- Techniques of Analysis for Urban Planning Research (designed; sole instructor)
(Course No. M0217000, SIT)
- Urban and Regional Systems Planning (omnibus course)
(Course No. R0270100, SIT)
- Introduction to Advanced Science and Technology (omnibus course)
(Course No. M0101000, SIT)
- Diversity and Cultures of other countries (omnibus course)
(Course No. M3013000, SIT)

Graduate Courses

- Spatial Planning for Disaster Risk Reduction (co-instructor)
(Course No.[5M762000, 6M010500, 7M690000], SIT)
- Environmental Research Seminar 1, 2 (co-instructor)
(Course No.[R1231400, R1231500], SIT)
- Urban Planning and Design (co-instructor, AIT)
- Urban Resilience Assessment (co-instructor, AIT)
- Urban Systems, Innovation, and Sustainability (co-instructor, AIT)

TRAINING
EXPERIENCE

GIS for risk assessment; Yangon City Development Committee, Myanmar, 2019.
 Urban Risk Monitoring System; Yangon Technological University, Myanmar, 2019.
 Periodic Tsunami risk communication workshops; Izu city municipality, Japan, 2017-2019.

RESEARCH
GRANTS

Grant-in-Aid for Early Career Scientists, Kakenhi 2021 - 2026
Title: Optimization Modeling for Risk Regulation Zones in Tsunami-prone Areas
Funded by: Japan Society for the Promotion of Science (JSPS)
Role: Principal Investigator

Grant for International research exchange 2021 - 2024
Title: Population migration trends during post-disaster recovery -the case of Christchurch and Canterbury Earthquakes
Funded by: Obayashi Foundation
Role: Principal Investigator

Grant-in-Aid for Early Career Scientists, Kakenhi 2018 - 2024

Title: Recovery Modeling for Identifying Recovery Trajectories based on Pre-existing Community and Spatial Characteristics

Funded by: Japan Society for the Promotion of Science (JSPS)

Role: Principal Investigator

Grant for Kakenhi-linked research 2020 - 2019

Title: Optimization Modeling for Risk Regulation Zones

Funded by: Shibaura Institute of Technology

Role: Principal Investigator

Research Grant for Urban Studies 2018 - 2019

Title: Optimization-based Research on the Designation of Tsunami Disaster Special Security Zones and its Effects on Risk Exposure and the Local Economy

Funded by: Obayashi Foundation

Role: Principal Investigator

Science and Technology Research Partnership for Sustainable Development, SATREPS 2015 - 2019

Title: Development of a Comprehensive Disaster Resilience System and Collaboration Platform in Myanmar

Funded by: Japan International Cooperation Agency (JICA) and Japan Science and Technology Agency (JST)

Role: Project member

AWARDS

Scholarship/Fellowship Awards

- Monbukagakusho (MEXT) Scholarship –Fully-funded for Ph.D 2011 - 2015
- Victoria Graduate Award Scholarship 2010 - 2011
- Massey University Student Exchange Scholarship 2007 - 2008
- College of Humanities and Social Sciences Award 2007 - 2008
- Ministry of Education Study Abroad Award 2007 - 2008
- Massey University Undergraduate Scholarship 2007 - 2008
- Sasakawa Undergraduate Scholarship Award 2006 - 2009

Academic Awards

- Excellent Young Researcher Award 2016
15th International Symposium on Urban Safety of Mega Cities in Asia (USMCA).
- Intl. Conf. on Urban Disaster Reduction Young Researcher Travel Grant 2014
Institute of Social Safety Science (ISSS), Japan.
- International Conference Student Travel Award
Institute of Industrial Science (IIS), University of Tokyo.
- Best Presentation Award 2012
31st National Conference of Institute of Social Safety Science (ISSS), Japan.
- First Class Honours 2011
Victoria University of Wellington, New Zealand.
- Student Best Paper Award Runner-up 2009
American Solar Energy Society (ASES) National Conference, U.S.A.
- Student Travel grant 2009
Society of Building Science Educators (SBSE), U.S.A
- UCLA Dean's Honors List 2007 - 2008
University of California Los Angeles (UCLA),
- Sasakawa Conference Presentation Award 2007
Massey University

PEER-REVIEWED PUBLICATIONS

1. Lin, J., Uchiyama, S., **Bhattacharya, Y.**, Nakamura, H. (2023). Efficacy of rain barrels and rain gardens to reduce urban pluvial flooding in densely built-up residential areas: a case study on Miyahara-Cho in Saitama City, Japan. *City and Built Environment* 1, 19 DOI: <https://doi.org/10.1007/s44213-023-00024-x>

2. An, Z., Uchiyama, S., **Bhattacharya, Y.**, Nakamura, H., (2022). Efficacy of Infiltration Facilities to Prevent Urban Pluvial Flooding *Journal of Asian urban environment*. <https://doi.org/10.21203/rs.3.rs-2262255/v1>
3. Yosi S. Mutiarni, Nakamura, H., **Bhattacharya, Y.** (2022). The Resilient Community: Strengthening People-Centered Disaster Risk Reduction in the Merapi Volcano Community, Java, Indonesia. *Sustainability*, 14(4), 2215. DOI: <https://doi.org/10.3390/su14042215>
4. Uchiyama, S., **Bhattacharya, Y.**, Nakamura, H. (2022). Efficacy analysis of Urban Planning scenarios for flood mitigation with Low Impact Development technologies using SWMM. *IOP: Earth and Environmental Science*, 973, 012012. DOI: <https://doi.org/10.1088/1755-1315/973/1/012012>
5. **Bhattacharya, Y.**, Kato, T. (2021). Development of an Agent based Model on the Decision-making of Dislocated People after Disasters. In Geertman, S.C.M., Pettit, C., Goodspeed R., Staffans, A. (Eds.), *Urban Informatics and Future Cities*, Springer. DOI: https://doi.org/10.1007/978-3-030-76059-5_20
6. **Bhattacharya, Y.**, Nakamura, H. (2021). Spatial Hedonic Analysis to support Tourism-sensitive Tsunami Mitigation Planning. *International Journal of Disaster Risk Reduction*, Elsevier, 60, 102283. DOI: <https://doi.org/10.1016/j.ijdr.2021.102283>
7. Hossain, M. S., Gadagamma, C. K., **Bhattacharya, Y.**, Numada, M., Kamal, A. S. M. M., Meguro, K. (2021). Integration of smart watch and geographic information system (GIS) to identify post-earthquake critical rescue area part. II. Analytical evaluation of the system. *Progress in Disaster Science*, 9, 100132. DOI: <https://doi.org/10.1016/j.pdisas.2020.100132>
8. Ashikin Binti Mabahwi, N., **Bhattacharya, Y.**, Nakamura, H., (2021). GIS-based multi-criteria analysis to identify site suitability of flood shelters in Kuantan, Malaysia, *IOP Conference Series: Earth and Environmental Science*, 799, 012027 DOI: [10.1088/1755-1315/799/1/012027](https://doi.org/10.1088/1755-1315/799/1/012027)
9. Wang, Y., **Bhattacharya, Y.**, Nakamura, H. (2021). Safety Evaluation of an Urban Redevelopment Area as an Evacuation Area for Large-scale Urban Fires. *The SEATUC Journal of Science and Engineering*, 2(1), 40-45. DOI: <https://doi.org/10.34436/sjse.2.1.40>
10. Hossain, M. S., Gadagamma, C. K., **Bhattacharya, Y.**, Numada, M., Morimura, N., Meguro, K. (2020). Integration of smart watch and geographic information system (GIS) to identify post-earthquake critical rescue area part. I. Development of the System. *Progress in Disaster Science*, 7, 100116. DOI: <https://doi.org/10.1016/j.pdisas.2020.100116>
11. Mutiarni, Y. S., Nakamura, H., **Bhattacharya, Y.** (2021). Financing Disaster Risk Reduction: Perspective from Budget Allocation towards Awareness Programs in Merapi Volcano Community. *IOP Conference Series: Earth and Environmental Science*, 746, 1. [012037]. <https://doi.org/10.1088/1755-1315/746/1/012037>
12. Mabahwi, N. A., Nakamura, H., **Bhattacharya, Y.** (2020). Flood Risk Management in Malaysia: The current hindrances for flood related agencies. *Asian Journal of Behavioural Studies*, 5(19), 11-24. <https://doi.org/10.21834/ajbes.v5i19.190>
13. Mabahwi, N. A., Nakamura, H., **Bhattacharya, Y.** (2019). Open Space as Evacuation Areas on Super Levees along the Arakawa River, Japan. *Asian Journal of Environment-Behaviour Studies*, 4(14), 21-52. <https://doi.org/10.21834/ajebs.v4i14.353>

14. Nordin, N., Nakamura, H., **Bhattacharya, Y.** (2019). Objective and Subjective Physical Measures of the Neighbourhood Environment among Older People. *Asian Journal of Environment-Behaviour Studies*, 4(14), 37-52. DOI: <https://doi.org/10.21834/jabs.v4i14.337>
15. **Bhattacharya, Y.** (2019). ニュージーランドにおける災害に伴う補償と検証 2011年カンタベリー地震における制度の運用と課題. 災害情報学会 Vol. 17(2). (written in Japanese: New Zealand's disaster compensation and investigative commission laws - looking at its implementation post-Canterbury earthquake (2011) and issues in practice)
16. **Bhattacharya, Y.**, Kato, T., Matsushita, T., Tun, E. E., Aye, T. T. (2018). Response-Capacity Analysis of Urban Systems to Support Emergency and Disaster Response in a Developing City: The Case of Yangon, Myanmar. *Journal of Disaster Research* Vol. 13(1). DOI: <https://doi.org/10.20965/jdr.2018.p0138>
17. **Bhattacharya, Y.**, Kato, T., Matsushita, T. and Aye, T. T. (2017). Analysis of Urban Functions for Disaster Situations in Yangon City, *Bimonthly Journal of Institute of Industrial Science (Seisan Kenkyu)* Vol. 69 No.4, University of Tokyo.
18. **Bhattacharya, Y.** and Kato, T. (2015). Development of a Post-disaster Recovery Simulation Model using a Multi-agent System Framework *Bimonthly Journal of Institute of Industrial Science (Seisan Kenkyu)*, Vol. 67 No.4, pp. 25-29, University of Tokyo.
19. Kato, T., **Bhattacharya, Y.**, Sugata, H. and Otagiri, R. (2013). Six Principles of Recovery: A guideline for preparing for future disaster recoveries *Journal of Disaster Research* Vol.8 Special Edition on the Great East Japan Earthquake, 2013. DOI: <https://doi.org/10.20965/jdr.2013.p0737>

0.1 In publication

0.2 Under Review

1. Shiozaki, Y., Nagamatsu, S., Sato, K. and **Bhattacharya, Y.** (2024). A Systematic Literature Review of Empirical Validation of Disaster Resilience Indicators. *International Journal of Disaster Risk Reduction*.
2. Uchiyama, S., **Bhattacharya, Y.**, Nakamura, H. (2024). Future Challenges for Implementation Process of Green Infrastructure for the purpose of Urban Stormwater Management in Japan. *Journal of Environmental Management*.
3. **Bhattacharya, Y.** and Kato, T. (2024). Optimization of Regulation Zones in Tsunami-prone Areas with Consideration of Short- and Long-term Impacts. *Computers and Urban Systems*.

NON-PEER
REVIEWED
PUBLICATIONS

1. **Bhattacharya, Y.** (2022). Comprehending Urban Complexity for better Resilience Planning *TECHNOLOGY: Cities and Infrastructure*, AIT Solutions. <http://solutions.ait.ac.th/wp-content/uploads/2022/08/TM2022-Cities-and-Infrastructure-August-2022.pdf>
2. **Bhattacharya, Y.**, Nakamura, H. (2023). Capturing Residents' Recovery Decision-making Processes in Agent-based Models validation with cases from Japan and Nepal (復興マルチエージェントモデルにおける住民意思決定プロセスの捉え方の妥当性の検証日本とネパールの事例をもとに), 日本建築学会 都市計画委員会 (*Architectural Institute of Japan*). (Sep, 2023). Urban Planning Special Research Committee on Disaster Recovery Methods Panel discussion session paper.

1. **Bhattacharya, Y.** (2024). 国際的な復興モデル研究とその活用 (The state of International Research on Recovery Modelling and its Use) 日本建築学会 都市計画委員会(*Architectural Institute of Japan*). (March 18, 2024). Urban Planning Special Research Committee on Disaster Recovery Methods 公開研究会
2. Shiozaki, Y., Nagamatsu, S., Sato, K. and **Bhattacharya, Y.** (2023). “A Literature Survey: Towards Validating Resilience Indicators” The 13th conference of the International society for Integrated Disaster Risk Management (iDRIM), IIT Roorkee (Sep, 2023).
3. Uchiyama S., **Bhattacharya, Y.** Nakamura H. (2022). “Barriers to the Implementation of Decentralized Green Infrastructure Practice with the Aim of Urban Stormwater Management in Japan” Proceedings of the 16th South East Asian Technical University Consortium Symposium (SEATUC). 6 p., Japan (Feb, 2022).
4. Ekpodessi, S.G., Nakamura, H., **Bhattacharya, Y.** (2022). “Impact of Land Insecurity on the Sustainable Agricultural Development: A Case Study of Agricultural Lands in the Republic of Benin, West Africa” Proceedings of the 16th South East Asian Technical University Consortium Symposium (SEATUC). 6 p., Japan (Feb, 2022). (-student awarded Best Technical Paper Award)
5. Uchiyama, S., **Bhattacharya, Y.**, Nakamura, H. (2021). “Efficacy analysis of Urban Planning scenarios for flood mitigation with Low Impact Development technologies using SWMM” The 6th International Conference on Environmental Engineering and Sustainable Development (CEESD 2021), Dec, 2021. (-student won the Best Presentation Award)
6. Uchiyama S., **Bhattacharya, Y.** Nakamura H. (2021). “Flood mitigation analysis with Low Impact Development technologies based on Urban Planning scenarios using SWMM : A case study in Saitama city, Japan” The 11th conference of the International society for Integrated Disaster Risk Management (iDRIM), Japan (Sep, 2021). (-student won the Young Scientist Session Award)
7. **Bhattacharya, Y.** Nakamura H. (2021). “Geographically Weighted Regression analysis to support tourism-sensitive tsunami mitigation planning” The 11th conference of the International society for Integrated Disaster Risk Management (iDRIM), Japan (Sep, 2021).
8. **Bhattacharya, Y.** and Kato, T. (2021). “Development of an Optimization model for Regulation Zones in Tsunami-prone Areas” Computers in Urban Planning and Urban Management, Helsinki, Finland (9-11 June 2021).
9. Wang, Y., **Bhattacharya, Y.**, and Nakamura, H. (2021). “Re-evaluation of the Safety of an Evacuation Area for Large-scale Urban Fires: A case study on Hikifune station redevelopment area in Tokyo” 15th South East Asian Technical University Consortium Symposium (SEATUC 2021), Virtual Online Symposium (25-26 Feb 2021).
10. Mutiarni, Y. S., Nakamura, H. and **Bhattacharya, Y.**, (2020) “Financing Disaster Risk Reduction: Perspective from Budget Allocation towards Awareness Programs in Merapi Volcano Community” Proceedings of the 5th International Conference on Indonesian Architecture and Planning (ICIAP) Oct. 2020 p.16.
11. Adachi, R., **Bhattacharya, Y.**, and Nakamura, H. (2019). “Impact Analysis of Designating Disaster Risk Zones on Land Prices of Tourist Regions. A study across four regions in Japan” 10th Conference on International Society for Integrated Disaster Risk Management (iDRiM).

12. **Bhattacharya, Y.**, Gadagamma, C.K. and Kato, T. (2019). “Optimization of Regulation Zones in Tsunami-prone Areas with Consideration of Short- and Long-term Impacts” Computers in Urban Planning and Urban Management, Wuhan, China (8-12 July 2019).
13. **Bhattacharya, Y.**, Gadagamma, C.K. and Kato, T. (2018). “Development of a Model for Consideration of Tsunami Disaster Special Security Zones and its Effects on Risk Exposure and the Local Economy” International Conference on Spatial Analysis and Modeling, Tokyo, Japan (8-9 September 2018).
14. **Bhattacharya, Y.**, Kato, T. and Matsuhita T. (2018). “The Proposal of an Urban Risk Monitoring System to direct the Development of Resilient Cities” 11th National Conference on Earthquake Engineering (NCEE), Los Angeles, California, U.S.A. (25-29 June 2018). (refereed)
15. **Bhattacharya, Y.**, Kato, T., Yamaguchi, Y. and Kamada, R. (2017). “Tsunami Resilience Planning of Izu City with Consideration to Coastal Tourism” 4th Asian Conference on Urban Disaster Reduction (ACUDR), Sendai, Japan. (26-28 Nov. 2017).
16. **Bhattacharya, Y.** and Kato, T. (2016). “Vulnerability Analysis of Urban Functions for Disaster Situations in Yangon City” International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA), Tacloban, Philippines. (-won the Excellent Young Researcher Award)
17. **Bhattacharya, Y.** and Kato, T. (2014). “Deciphering Disaster Recovery Characteristics through a Multi-agent Simulation Model” 3rd International Conference on Urban Disaster Reduction, Earthquake Engineering Research Institute, Colorado, U.S.A.
18. **Bhattacharya, Y.** and Kato, T. (2013). “Assessing Recovery: existing practices and evaluation measures” International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA), Hanoi Vietnam, 2013.
19. **Bhattacharya, Y.** and Charleson, A. W. (2013). “Integrating Passive Thermal Comfort Features with Seismic Retrofitting Techniques for Non-Engineered Housing in India” International Conference on Challenges in Disaster Mitigation and Management (India). (15-17 Feb. 2013).
20. **Bhattacharya, Y.** and Charleson, A. W. (2012). “Potential for Thermal Benefits in Low-cost Seismic Retrofitting Technology” 31st National Conference of Institute of Social Safety Science, shizuoka, Japan (November, 2012). (-won the Best Presentation Award)
21. **Bhattacharya, Y.** and Charleson, A. W. (2012). “Seismic Vulnerability-reduction via Integration of Passive Thermal Technologies” 15th World Conference on Earthquake Engineering (WCEE), Lisbon, Portugal (24-26 Sept. 2012). (refereed)
22. **Bhattacharya, Y.** and Milne, M. (2009) “Psychrometric Chart Tutorial: A Tool for Understanding Human Thermal Comfort Conditions” ASES (American Solar Energy Society) National SOLAR 2009 Conference, New York, U.S.A. (-won the Student Best Paper Runner-up Award)
23. Milne, M., Liggett, R., Benson, A. **Bhattacharya, Y.** (2008) “Additions to a Design Tool for Visualizing the Energy Implications of California’s Climates” ASES (American Solar Energy Society) National SOLAR 2009 Conference, New York, U.S.A.

Undergraduate Thesis

1. Noggle, Rose (2022) Developing a Spatial Decision Support Tool for Planning Tsunami Evacuation Shelter Location.
2. 安部裕貴 (2022) 「住民および観光客を対象とした津波避難シミュレーション分析 静岡県沿岸部地域を事例として」 (Tsunami evacuation simulation analysis of residents and tourists).
3. 穴倉穰 (2022) 「津波発生時における自動車避難による道路混雑度の分析 静岡県沿岸部地域を事例として」 (Analysis of road congestion due to car evacuation during Tsunami).
4. 二瓶有輝 (2022) 「津波避難施設の適正配置に関する研究 静岡県沿岸部地域を対象として」 (A study on proper allocation of tsunami evacuation facilities using AHP method).
5. 池田海大 (2022) 「ネパール山間部におけるゴルカ地震後の住宅再建の実態と課題」 (Housing reconstruction after the Gorkha earthquake in the mountainous areas of Nepal -current conditions and issues).
6. 安展草草 (2022) 「小規模分散型の雨水浸透施設による内水氾濫対策の効果 世田谷区目黒川流域を対象として」 (Effects of incorporating small-scale distributed rainwater infiltration facilities (LIDs) on inland urban flooding).
7. 林佳静 (2022) 「密集住宅地におけるレインバレルおよびレインガーデンを用いた雨水管理効果の検証 さいたま市北区宮原町を対象に」 (Assessment of rainwater management efficiency by using rain barrel and rain garden facilities in densely populated residential areas).
8. Hisatomi, Julia Nantes (2021). Road Network Analysis for Tsunami Evacuation in Shizuoka Prefecture.
9. 須野原拓海 (2020) 「木造密集市街地における樹の火災延焼防止効果検証 —墨田区東向島地区を対象に—」 (Analysis of fire spread prevention effect of trees in densely built-up wooden areas).
10. Welzel, Carolina (2020). Evaluation of the efficiency of permeable pavements through the use of PCSWMM simulations - a case study on the neighborhood Capão da Embuia, Curitiba, Brazil.
11. Fabro, Eliza Streitemberger (2020). Literature Review and information gathering on the relationship between Brazil's Urbanization and it's Water Crisis.
12. 内山駿・田部孝憲 (2020) 「内水氾濫対策としてのストームウォーターマネジメントの効果と課題 —さいたま市緑区を対象に—」 (Efficacy and challenges of storm water management as a countermeasure against inland flooding).
13. 池澤未来 (2020) 「災害後における商業の復興プロセスの実態と課題 -栃木市蔵の街地区を対象に—」 (Post-disaster commercial reconstruction process -the reality and challenges).
14. 宇田川和希 (2019) 「歩行速度の個人差を考慮した津波避難完了時間の分析 沼津市戸田地区を事例として」 (Analysis of tsunami evacuation completion time considering individual differences in walking speed).
15. 井澤涼太・大森瑞穂 (2019) 「ホテル客室からの海眺望が宿泊価格に及ぼす影響 —南海トラフ地震による津波リスク想定地域を対象として—」 (The impact of sea view from hotel rooms on room prices).

16. 土屋俊又 (2019) 「津波被災地における被災者の住宅移転・再建の実態と意思決定プロセスーいわき市岩間地区を事例としてー」 (The decision-making process of housing relocation/reconstruction of disaster victims in tsunami-stricken areas and the current realities).
17. 波多野由基 (2018) 「災害警戒区域指定による観光への影響 観光防災まちづくりに向けて」 (Impact on tourism due to the designation of disaster risk areas).

Graduate Thesis

1. Wang, Yujie (2022). Evaluation of the Fire Safety of Evacuation Areas for Large-scale Urban Fires. Masters Thesis.
2. 内山駿(2022) 「土地計画のためのストームウォーターマネジメント」 (Storm water management for urban planning). Masters Thesis.
3. 安達龍佑(2019) 「ホテル客室からの海眺望が宿泊価格に及ぼす影響」 (The impact of sea view from hotel rooms on room prices). Masters Thesis.

INVITED TALKS

- "Computational Urban Planning for Disaster Risk Reduction" Crisis and Environment Management Policy Institute (CeMI), Japan, 2023.
- "Towards an Urban Risk Monitoring System for Yangon City" Yangon City Development Committee (YCDC) and Yangon Technological University (YTU), Myanmar, 2019.
- "Urban Planning for Disaster Mitigation and Recovery", National Society for Earthquake Technology (NSET), Nepal and Indian Institute of Technology Madras (IITM), 2019.
- "Urban Planning for Disaster Mitigation -in practice and research", Keynote speech at International Seminar on Disaster Management and Community Resilience, University of Dhaka, Bangladesh, 2019.
- "ニュージーランドにおける事故補償制度とカンターベリー地震への応用", (New Zealand's Accident Compensation scheme and its application in the aftermath of the Canterbury Earthquakes -presented in Japanese), Keynote at the Symposium on Accountability in Disasters, University of Tokyo, Japan, 2018.
- "伊豆市の観光防災まちづくり", (Disaster Mitigation based Machizukuri for Tourism: case of Izu city -presented in Japanese) Disaster Prevention Research Institute, Kyoto University, Japan, 2018.
- "Earthquake Mitigation through spatial policy research", Department of Civil Engineering, California State University, U.S.A., 2018.
- "Japanese Urban Planning Techniques for Disaster Mitigation", Department of Civil Engineering, GITAM (Gandhi Institute of Technology and Management), Vishakhapatnam at International Workshop on Disaster Mitigation and Management (IWDMM), India, 2018.
- "The Power of Universities", School of Engineering, Vignan University, Vishakhapatnam, India, 2018.
- "Modelling Recovery through an Agent-based Simulation Approach", International Conference for Decade Memory of the Great Wenchuan Earthquake, Sichuan University, China, 2018.

SERVICE AND
OUTREACH

Research Fellow

Industrial Institute of Science, University of Tokyo.

Vice Chairperson

Australia and New Zealand Researchers Network in Japan (ANZOR).

Journal Section Editor

Journal of International Society for Integrated Disaster Risk Management (IDRiM).

Special Research Committee member

Architectural Institute of Japan (AIJ); City Planning Institute of Japan (CPIJ).

Adhoc Reviewer

Fire Safety Journal; Journal of Disaster Research; Journal of Japan Society of Civil Engineers.

Sakura Science Program, Main Coordinator

received grant for organizing a fully funded short-term university exchange program with Gandhi Institute of Technology and Management (GITAM) and Vignan University, Vishakhapatnam, India. (2019)

Global Problem-based learning (GPBL) program, Co-Coordinator

with Sepuluh Nopember Institute of Technology (ITS), Surabaya, Indonesia.(2018)

with Indian Institute of Technology, Madras (IITM), India

PROFESSIONAL
MEMBERSHIPS

Architectural Institute of Japan (AIJ). 都市計画本委員会 災害対策・復興の手法構築小委員会 (Special Research Committee on Development of new post-disaster recovery planning methods)

City Planning Institute of Japan (CPIJ).

International Society for Integrated Disaster Risk Management (IDRiM)

Regional Studies Association (RSA)

LANGUAGES

English, Japanese (eqvl. JLPT 1), Hindi, Bengali (all at native level)

PROGRAMMING
AND SOFTWARE

Softwares: Adobe packages, AutoCAD, ArcGIS, RStudio, SPSS

Basic programming knowledge in: Java, Action script, Haskell, Delphi, Prolog, Python, HTML, and ABM platforms such as Net Logo, Artisoc, and Repast Symphony