Yang Song (Curriculum Vitae)

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YouTube: https://www.youtube.com/user/theansweryang

EDUCATION

2017.05   Doctor of Philosophy in Environmental Design and Planning
                 College of Architecture, Arts and Humanities, Clemson University, Clemson, SC

2013.05   Master of Landscape Architecture
                 College of Architecture, Arts and Humanities, Clemson University, Clemson, SC

2011.07   Bachelor of Science in Landscape Gardening
                 School of Landscape Architecture, Beijing Forestry University, Beijing, China

ACADEMIC & PROFESSIONAL EMPLOYMENT

2020 -   Assistant Professor
                 Department of Landscape Architecture and Urban Planning, Texas A&M University

2017-2020   Assistant Professor
                 Department of Landscape Architecture, North Dakota State University

2013-2017   Studio Instructor
                 Department of Landscape Architecture, Clemson University

2012 -2015   Research/Teaching Assistant
                 Department of Landscape Architecture Clemson University

2010   Intern Landscape Designer
                 Forestry& Design Institute, Wuhan University of Technology, China

AWARDS & HONORS

International Awards:

1. 2023   Finalist of Landscape Institute Research Award 2023 (UK)
                  A Framework in Evaluating Human-Nature Interaction in A Public Place
                  https://awards.landscapeinstitute.org/li-awards-2023-finalists/

2. 2023   Among the Papers of the Year for the Journal of Computational Urban Science
                  Why do we love the high line?
                  https://mp.weixin.qq.com/s/PSFG_ed883Bj2UgRgPZ5-w

3. 2022   R+D Award Architect Magazine
                  E-games-lab—eFargo

https://www.architectmagazine.com/awards/r-d-awards/r-d-award-e-games-labefargo_o

4. 2014   Second Prize in 2014 "Yuan Ye Award" International Competition
               Cells for change, Brownfield redevelopment design in Nashville, TN

National Awards:

5. 2023   Great Place Research Award (EDRA)
               Evaluating Human-Plant Interaction in a Public Place: A Social Media Data-Informed Evaluation
               Method and Application in Chicago's Lurie Garden
               https://www.edra.org/page/greatplacesawards

6. 2020   Certificate of Research Excellence (EDRA)
               Developing a Social Media Data Based Post-Occupancy Evaluation Method: New Understandings of
               Social and Physiological Attributes of Designed Waterscape
               https://www.edra.org/page/EDRA_CORE_featured

7. 2019   National ASLA Honor Award (Research)
               Using Social Media Data to Understand Site-Scale Landscape Architecture Design: A Case Study of
               Seattle Freeway Park
               https://www.asla.org/2019awards/629092-Using_Social_Media_Data_To_Understand_Site.html

8. 2012   Casey Tree Farm Master Plan Design Competition and Awards Program Finalist
               Casey Trees Farm Master Planning

Regional Awards:

9. 2022   ASLA Oklahoma Merit Award of Research
               A Social Media Data-informed Garden Evaluation Method Used in Examining Chicago's Lurie
               Garden

10. 2019   ASLA Central States Honor Award (Research)
               Using social media data to understand Site-Scale landscape architecture design

11. 2019   ASLA Oklahoma State Honor Award (Research)
               How do water features affect people's activities and feelings in a public space?

12. 2018   MAIN STREET Revitalizer Award by the Office of the Governor in North Dakota
               Downtown revitalization in Belfield, ND

13. 2013   ASLA Student Awards, South Carolina Chapter
               Nashville Waterfront park

14. 2013   South Carolina ASLA Student Award of Merit

University Awards:

15. 2019   NDSU Nice Fellowship

A fellowship program for promoting Innovation, Creativity and Entrepreneurship

16. 2011   Best Team for Communication in Clemson Design Week competition
                Clemson Mixed Use Development Planning

17. 2009   First Prize in the Studio Graphic Design Competition
                Tree Life

Honors:
18. 2013   Member of Sigma Lambda Alpha

19. 2012   Member of Phi Kappa Phi (top 5%)

Awards from Students (as the instructor of record):
1. 2023   CELA student award (Ruiqi Yang)

2. 2022   APA-Texas Chapter Awards, Caldwell Comprehensive Plan (LAUP, TxTC, and City of Caldwell)

3. 2019   2019 Nebraska Dakotas Chapter ASLA Student Award of Honor, Futurescapes (Emily Hopfauf,
    Nathaniel Horvath, Matthew Keller, Amy Kronbeck, Nhi Nguyen, Austin Schmidt, Zach Unruh)

4. 2019   Nebraska Dakotas Chapter ASLA Student Award of Honor, Fargo-fication (Austin Schmidt)

5. 2019   NDSU Collitan Memorial Award, Reflection (Evan Lecy)

6. 2019   NDSU Best Thesis Award, Bear Den Landing (Morgan Kollman)

7. 2018   NDSU Best Visualization Thesis Award, Instascape (Van Der Hagen Jordan)

8. 2014   ASLA Student Awards Competition in South Carolina Chapter, The Green Room (Ally Hangartner)

9. 2012   ASLA Student Awards Competition in South Carolina Chapter, Pickens Greenway Design (Hong
    Zhang, Yuanchi Zhao, Luo Huang, Yiwen Cui, Bei Kong, Yanshu Liu)

GRANT SUPPORT & SPONSORED RESEARCH

Research Grants
1. 2020-2023   Fighting Obesity by Reinventing Public Transportation: A Natural Experiment ($2,591,084)
                 Role: Co-Investigator (Multi-PI as Chanam Lee, Wei Li, and Marcia Ory)
                 Description: This is a natural experimental study to evaluate health and mobility impacts of
                 bus rapid transit; to examine costs and benefits of bus rapid transit implementation; and to
                 explore barriers and facilitators of bus rapid transit use.
                 Sponsor: National Institutes of Health (R01CA228921), 2018-2023.

2. 2020-2022   HOP program University of Georgia ($1500)
                 Role: Sub-Award PI
                 Description: A community engagement and research project (hosted by college of

environmental design in University of Georgia) to help rural Georgia Communities promote active living and healthy behavior.
Publication: https://rsaiconnect.onlinelibrary.wiley.com/doi/full/10.1111/rsp3.12655
Sponsor: DHHS-Center for Disease Control & University of Georgia

3. 2019-2020   Efargo 2019-2020 ($61,986)
     Role: Principal Investigator (Co-PIs: Malini Srivastava)
     Description: Discover energy saving behaviors for Youth; Smart monitoring and web mapping App creation for Fargo Public Schools- Phase I.
     Sponsor: US Department of Energy

4. 2018-2019   Efargo 2018-2019 ($62,668)
     Role: Principal Investigator (Co-PIs: Malini Srivastava, Mike Christenson)
     Description: Discover energy saving behaviors for Youth; Developing online crowd-source mapping apps to promote energy saving behavior. Sponsor: US Department of Energy

5. 2018   Research Development Travel Award ($1,500)
     Role: Principal Investigator
     Description: Travel and supply needs for my two research projects on Social Media and Big Data.
     Sponsor: North Dakota State University

6. 2018   Research Completion Program ($750)
     Role: Subaward Principal Investigator
     Description: Providing programming assist for calculating landscape aesthetics metrics.
     Sponsor: College of Architecture, Arts &Humanities, Clemson University

7. 2015-2017   CAAH Research Program Award ($1,300)
     Role: Principal Investigator
     Description: Developing quasi-experiment for Landscape Manipulatives in two middle schools in South Carolina.
     Sponsor: College of Architecture, Arts &Humanities, Clemson University

Service Learning Grants

8. 2023-2028   Working on Wellness Environments ($828,000)
     Role: Co-PI for $1,7000 (PI as Walker, JR)
     Description: This project is working with partners in Hudspeth, Maverick, Starr, and Webb counties to improve access to healthy foods such as fresh fruits and vegetables and routine physical activity for residents.
     Sponsor: CDC High Obesity Program (DP230013), 2018-2023.

9. 2018-2023   Working On Wellness Environment (WOW-E) ($5,265,397)
     Role: Sub-Award PI for $75,000 (Multi-PI Sungmin Lee)
     Description: A community engagement and research project (hosted by Recreation, Park & Tourism Science department) to help rural Texas Communities promote active living and healthy behavior (NU58DP006564-05-00). PI: Jamie Rae Walker
     Sponsor: DHHS-Center for Disease Control

10. 2019-2024   Partnership to Increase Recreation Opportunities and Access ($13,190)
                 Role: Principal Investigator (Co-PIs: Matthew Kirkwood, handed over after 2020)
                 Description: Provide landscape design and planning assistance to the communities in South
                 Dakota, North Dakota and Northwest Minnesota.
                 Sponsor: National Park Service

11. 2019-2020   NDSU Design Network ($5,000)
                 Role: Principal Investigator
                 Description: A online web application to visualize NDSU alumi information. Sponsor: Architecture
                 and Landscape Architecture in NDSU. https://www.landscapeinformatics.com/ndsudesignnetwork

12. 2019-2020   Lisbon Walkability and Connectivity Analysis ($4,000)
                 Role: Principal Investigator (Co-PIs: Matthew Kirkwood)
                 Description: Conduct city-wide connectivity and accessibility analysis to identify linkages and
                 amenities for future improvements. Sponsor: City of Lisbon, ND

13. 2019-2020   The Lake Mitchell & Near Lake Wetland Public Use Plan ($14,500)
                 Role: Principal Investigator (Co-PIs: Matthew Kirkwood)
                 Description: Create plans and strategies for the lakeside development and upper stream
                 watershed management.
                 Sponsor: City of Mitchell, SD

14. 2018   Spirit Lake Equestrian Trail Park Proposal and Evaluation ($2,832)
                 Role: Co-Principal Investigator (PI: Matthew Kirkwood)
                 Description: Planning horse trails facilities for the tribal community in Devils Lake, ND.
                 Sponsor: National Park Service

15. 2018   Belfield Downtown Revitalization Proposal ($1,200)
                 Role: Co-Principal Investigator (PI: Matthew Kirkwood)
                 Description: Transforming vacant lots as inviting public spaces for Downtown Belfield, ND.
                 Sponsor: City of Belfield, ND

16. 2018   Cormorant Park Renovation Proposal ($2,694)
                 Role: Co-Principal Investigator (PI: Matthew Kirkwood)
                 Description: Planning sports facilities and ADA trails for the community center in Cormorant, MN.
                 Sponsor: Cormorant Township, MN

17. 2018   Mandan Veteran's Cemetery Expansion and Columbarium Integration ($7,914)
                 Role: Co-Principal Investigator (PI: Dominic Fischer)
                 Description: Conducting path demand and management study using Grasshopper and Python.
                 Sponsor: North Dakota National Guard

Submitted not funded
As PI, A novel analysis of the long-term usage and perceived site qualities of US City Parks, Arts & Humanities Fellows
Program, TAMU Division of Research, Amount: $15,000

As Co-PI, Yang Song, Collaborative Research: Integrating Multi-scale Urban Flooding Resilience Planning and Design with AI-driven Innovations, National Science Foundation, Amount: $319,916

As Co-PI, Yang Song, Using a state-wide model to examine geospatial and temporal clusters of health inequities among older adults with Alzheimer's and related Dementia, Arts & Humanities Fellows Program, TAMU Division of Research, Amount: $75,750

As Co-PI, Collaborative Research:Using a nation-wide model to examine geospatial and temporal clusters of health inequities using novel data,, Amount: $190,723

PEER-REVIEWED RESEARCH
Papers in Academic Journals

1. Fernandez, J., Melcher, K., **Song, Y.**, Rezaeimalek, S., Liu, P., & Yang, R. (2024). Disparities in city-wide park use before and during the COVID-19 pandemic: A case study of Atlanta, Georgia. *Sustainable Cities and Society*, *101*, 105148. (Impact Factor: 11.7)

2. Liu, P., **Song, Y.**, Zou, Q., Tang, J., & Fernandez, J. (2024). Environmental press of urban greenspace pre-post COVID on older adults: A big data study in metropolitan Atlanta. *Cities*, *145*, 104733. (Impact Factor: 6.7)

3. Sun, P., Liu, P., & **Song, Y**. (2024). Seasonal variations in urban park characteristics and visitation patterns in Atlanta: A big data study using smartphone user mobility. *Urban Forestry & Urban Greening*, *91*, 128166. (Impact Factor: 6.4)

4. Ding, Y., Lee, C., Chen, X., **Song, Y.**, Newman, G., Lee, R. J., ... & Sohn, W. (2023). Exploring the association between campus environment of higher education and student health: A systematic review of findings and measures. *Urban Forestry & Urban Greening*, 128168. (Impact Factor: 6.4)

5. Zhu, R., Newman, G., Li, D., **Song, Y.**, & Zou, L. (2023). Associations between vacant urban lands and public health outcomes in growing and shrinking cities. *Urban Forestry & Urban Greening*, 89, 128127. (Impact Factor: 6.4)

6. **Song, Y.**, Zhong, S., Lee, C., & Xu, M. (2023). Causal Effect of New Bus Rapid Transit on Non-Work-Related Activities. *Journal of Planning Education and Research*, 0739456X231192022. (Impact Factor: 4.0)

7. Zhang, B., **Song, Y.**, Liu, D., Zeng, Z., Guo, S., Yang, Q., ... & Shen, X. (2023). Descriptive and Network Post-Occupancy Evaluation of the Urban Public Space through Social Media: A Case Study of Bryant Park, NY. *Land*, 12(7), 1403. (Impact Factor: 3.9)

8. Zhong, S., Lee, C., Bian, J., Towne Jr, S. D., Lee, H., **Song, Y.**, ... & Ory, M. G. (2023). Environmental and Mobility Strategies During Early COVID-19: Insights From an Empirical Study Focusing on Park Visitations in El Paso, TX. *HERD: Health Environments Research & Design Journal*, 19375867231166080. (Impact Factor: 2.2)

9. **Song, Y.**, Lee, C., Tao, Z., Lee, R. J., Newman, G., Ding, Y., ... & Sohn, W. (2023). COVID-19 and campus users: A longitudinal and place-based study of university mobilities in Texas. *Sustainable Cities and Society*, 104656. (Impact Factor: 11.7)

10. **Song, Y.**, Yang, R., Lu, H., Fernandez, J., & Wang, T. (2023). Why do we love the high line? A case study of understanding long-term user experiences of urban greenways. *Computational Urban Science*, 3(1), 18.

11. Fernandez, J., **Song, Y.**, Rezaeimalek, S., Melcher, K., & Longnecker, D. (2023). Exploring rural community place assessment through mobility and social media data in Fort Gaines, Georgia. Regional Science Policy & Practice, 15(2), 425-446. (Impact Factor: 1.7)

12. **Song, Y.**, Lee, S., Park, A. H., & Lee, C. (2023). COVID-19 impacts on non-work travel patterns: A place-based investigation using smartphone mobility data. *Environment and Planning B: Urban Analytics and City Science*, 23998083221124930. (Impact Factor: 3.5)

13. Lin, Z., Wang, Y., **Song, Y.**, Huang, T., Gan, F., & Ye, X. (2022). Research on Ecological Landscape Design and Healing Effect Based on 3D Roaming Technology. *International Journal of Environmental Research and Public Health*, 19(18), 11406. (Impact Factor: 4.61)

14. Fernandez, J., **Song, Y.,** Padua, M., & Liu, P. (2022). A Framework for Urban Parks: Using Social Media Data to Assess Bryant Park, New York. *Landscape Journal*, 41(1), 15-29.

15. Fernandez, J., Powers,M., **Song, Y**. (2022). Measuring Collaboration in Community and Campus Planning. *Journal of Architectural and Planning Research*. 37(3)

16. **Song, Y.,** Newman, G., Huang, X., & Ye, X. (2022). Factors influencing long-term city park visitations for mid-sized US cities: A big data study using smartphone user mobility. *Sustainable Cities and Society*, 80, 103815. DOI: https://doi.org/10.1016/j.scs.2022.103815 (Impact Factor: 11.7)

17. **Song, Y.,** Ning, H., Ye, X., Chandana, D., & Wang, S. (2022). Analyze the usage of urban greenways through social media images and computer vision. *Environment and Planning B: Urban Analytics and City Science*, 23998083211064624. DOI: https://doi.org/10.1177/23998083211064624 (Impact Factor: 3.5)

18. Ye, X., Hua, S., Lu, Z., **Song, Y**., & Yu, S. (2021). Towards an AI-driven framework for multi-scale urban flood resilience planning and design. *Computational Urban Science*, 205(103956), Article 103956. DOI: https://doi.org/10.1007/s43762-021-00011-0

19. Lin, Z., Zhang, L. u., Tang, S. u., **Song, Y**., Ye, X., & Song, Y. (2021). Evaluating Cultural Landscape Remediation Design Based on VR Technology. *ISPRS International Journal of Geo-Information*, 10(6), 423–423. DOI: https://doi.org/10.3390/ijgi10060423 (Impact Factor: 3.09)

20. **Song, Y**., Wang, R., Fernandez, J., & Li, D. (2021) Investigating sense of place of the Las Vegas Strip using online reviews and machine learning approaches. *Landscape and Urban Planning*, 205, 103956. DOI: https://doi.org/10.1016/j.landurbplan.2020.103956 (Impact Factor: 9.1)

21. Wang,T., Yang, R., Shang,S., **Song, Y**(2021). The Study of Vernacular Landscape Traditional Form in Wuling District of Western Hubei. *Landscape Architecture Journal*. ISSN 1673-1530. DOI: 10.14085/j.fjyl.2021.05.0107.07

22. **Song, Y**. , Fernandez, J., Wang,T. (2020). Understanding Perceived Site Qualities and Experiences of Urban Public Spaces: A Case Study of Social Media Reviews in Bryant Park, New York City. *Sustainability*. DOI: https://doi.org/10.3390/su12198036 (Impact Factor: 4.0)

23. Maghlakelidze, M., Jiang, S., **Song, Y**., Li, D., Li, Xiaojie (2020). Playground Trees' Impacts on Children's Play Behaviors and Well-being. *Landscape Architecture Journal*. 09. ISSN 1673-1530. DOI: DOI：10.14085/j.fjyl.2020.09.0063.14

24. **Song, Y**., Zhang, B. (2020). Using Social Media Data in Understanding Site-Scale Landscape Architec- ture Design: Taking Seattle Freeway Park as an Example. *Landscape Research*. DOI: 10.1080/01426397.2020.1736994 (Impact Factor: 1.8)

Research Monographs

1. Wang, T., Mao, Y., **Song, Y**. *(2020) Rural Homestay Location Planning for Wuling Mountain Area in West Hubei. Huazhong University of Science & Technology Press. (in Chinese).* ISBN-10 : 7568065324*.* Link: https://amzn.to/3rVfSb0

Articles in Conference Proceedings & Professional Magazines

1. Reim, P., **Song, Y.,** & Srivastava, M. (2021). Automated Energy Use Data Collection and Comparative Visualization in Public Schools for Game-Based Environmental Education for K-12 Students. ARCC 2021. ISBN 978-1-935129-30-1

2. **Song, Y**., Davis-Kollman, M. (2019). *Identifying Oil Spill Hazards in North Dakota, through Hydraulic Modelling and Conservation Planning.* Landscape Research Record No.08, 224-335. ISSN 2471-8335

3. **Song, Y**., Kolb, M. (2019). *Fostering Real Connections: Commercial strip revitalization through social media data and transportation engineering models.* Landscape Research Record No.08, 224-335. ISSN 2471-8335

4. Liu,P., **Song, Y**., Powers, M. (2019). *The Integration of Behaviors Mapping and Connectivity Measures: a New Method for Interpreting Healthcare Environments.* Landscape Research Record No.08, 326-332. ISSN 2471-8335

5. **Song, Y**., Fernandez, J. (2017). *A Glimpse of Big Data: How Social Media Can Inform Urban Design*. Santa Fe, NM: 54th IMCL(International Making Cities Livable).

6. Fernandez, J, **Song, Y**. (2017). *Evaluating Landscape Character through Parametrical Indicators: A Case Study of the Campus-Community Edge*. Santa Fe, NM: 54th IMCL(International Making Cities Livable).

7. **Song, Y.** (2017). *Landscape Manipulatives: A Study of Math Gardens and Learning Outcomes in Middle School Mathematics Education Research,* Clemson University ProQuest Dissertations Publishing, 2017. 10216416

8. **Song, Y**. (2014). *Cells for Change.* Worldscape Magazine No.1 2015, P-44.

9. **Song, Y.** *(2013). Transforming Urban Brownfields: Creating Natural Communities Through Successful Stormwater Management And Bioremediation Strategy.* Clemson University ProQuest Dissertations Publishing, 2013. 153944

Conference Abstracts & Presentations

1. Noh, Y., Lee, C., **Song, Y.,** Li, Wei., Lee, H. (2024) *Evaluating the Impacts of Bus Rapid Transit (BRT) Implementation on the Housing Market in El Paso, Texas: A Spatial Hedonic and Difference-in-Differences Analysis. American Real Estate Society 2024*

2. Guan, J., Wu, Q., Wang, R., **Song, Y.** (2023). *Examining the Influence of Lake Water Quality on Lake Cultural Ecosystem Services: Big Data Analytics coupling Lake Water Quality and Google Review at U.S scale.* 2023 American Geophysical Union Annual Conference.

3. Haoyue, Y., **Song, Y.**, Lee, C, Prochnow, T. (2023). *Defining Social Segregation and Identifying the Role of Public Spaces in Social Interaction: A Data-driven Case Study in Laredo, Texas*. 2023 Association of Collegiate Schools of Planning 63rd Annual Conference.

4. Deng, L., Lee, C., Lee, S., Newman, G., Li, D., **Song, Y.**, Lee, R., Sohn, W. (2023). *Physical Activity and Psychological Wellbeing of U.S. College Students: Impacts of COVID-19 and Institutional Characteristics*. 2023 Association of Collegiate Schools of Planning 63rd Annual Conference.

5. Guan, J., Wu, Q., Runzi, W., **Song, Y.** (2023). *The influence of water quality on lake cultural ecosystem service— evidence from 182 U.S lakes*. 2023 Association of Collegiate Schools of Planning 63rd Annual Conference.

6. Jeong, J., Lee, C, Brown, R., **Song, Y.**, Sang, H. (2023). *The Impact of Extreme Heat on Destination Visitation Patterns in El Paso, TX: A spatiotemporal exploration using the smartphone mobility data* 2023 Association of Collegiate Schools of Planning 63rd Annual Conference.

7. Ding, Y., Lee, C., Chen, X., Newman, G., **Song, Y.**, Lee, R., Li, D. (2023). *Campus Environment of Higher Education and Student Health: A Systematic Literature Review*. In CELA (Council of Educators in Landscape Architecture) 2023.

8. Lee, C., Newman, G., Li, D., **Song, Y.**, Lee, R., Sohn, W., Lee, S., Ding, Y. (2023). *Landscape Architecture for Health: Student Health and Campus Environment in Higher Education*. In CELA (Council of Educators in Landscape Architecture) 2023.

9. Tao, Z., Newman, G., **Song, Y.** (2023). *Assessing the Impact of Green Infrastructure on Community Recovery from Tropical Storm Imelda in Houston, Texas*. In CELA (Council of Educators in Landscape Architecture) 2023.

10. Ding, Y., Lee, C., Li, D., Chen, C., **Song, Y.**, Newman, G., Lee, R.J., Lee, S., Sohn, W.M., & Li, D.(2023). *Campus Environment of Higher Education on Students' Health: A systematic review,* Health & Nature Symposium, *College Station*, TX.

11. Lee, R.J., Xu, Z., Newman, G., **Song, Y.**, Lee, C., Sohn, W.M., Li, D., & Ding, Y. (2023). *Green Infrastructure and Campus Health: Exploring the characteristics of community health and campus users in three university towns in Texas,* Health & Nature Symposium, *College Station*, TX.

12. Lee, R.J., Newman, G., Lee, C., **Song, Y.**, Xu, Z., Sohn, W.M., Ding, Y., & Li, D. (2022). *Green Infrastructure and Campus Health: Examining the Characteristics of College Campus Users*. Environmental Design Research Association (EDRA), Greenville, SC.

13. Melcher, K., Fernandez, J., **Song, Y.** (2022). *City-Wide Park Use before and during COVID-19: A Case Study of Atlanta, Georgia*. Environmental Design Research Association (EDRA), Greenville, SC .

14. **Song, Y.,** Lee, C., Lee, S., Fernandez, J., Towne, S. (2022). *Mobility studies in the era of big data: Toward the*

future of environment-behavior research in landscape architecture and beyond. In CELA (Council of Educators in Landscape Architecture) 2022.

15. Haoyue, Y., **Song, Y.,** Lee, C. (2022). *Visualizing the centrality of public spaces in urban social network: a data-driven case study in Laredo, Texas*. In CELA (Council of Educators in Landscape Architecture) 2022.

16. Zhitan, T., Newman,G., **Song, Y**. (2022). *The Effects of Green Infrastructure on Commerce Flood Resilience: Analyzing Visitation Rates of Commercial Activity after Floods in Houston, TX*. In CELA (Council of Educators in Landscape Architecture) 2022.

17. Zhang, B., Milhalko, C., **Song, Y**. (2022). *Revealing the Garden Appreciation Pattern Using Instagram Data*. In CELA (Council of Educators in Landscape Architecture) 2022.

18. Fernandez,J., **Song, Y.,** Padua, M., Liu, P. (2022). *Creating a Novel Framework for Urban Parks through Social Media Data Assessment*. In CELA (Council of Educators in Landscape Architecture) 2022.

19. Shu,S., **Song, Y.,** Wenwen, C. (2022). *Factors Influencing Long-term City Park Visitation for Midsize US Cities: A Study Using Smart User Mobility*. In CELA (Council of Educators in Landscape Architecture) 2022.

20. Fernandez, J., & **Song, Y.** (2021). *Reinventing the Site Visit: Application and Student Assessment of Innovative Online Approaches*. CELA (Council of Educators in Landscape Architecture) 2021.

21. **Song, Y.,** & Fernandez, J. (2021). *Perceived site qualities through the social media: a case study of Bryant Park, NYC*. In CELA (Council of Educators in Landscape Architecture) 2021.

22. Padua, M., Havens, G., Fernandez, J., **Song, Y.,** & Zhang, B. (2021). *How Big Data Benefits You: Using Information for Good in Landscape Architecture*. In ASLA national conference 2021.

23. Liu,B., **Song,Y.,** Zhang,B. (2020). *Understanding Art Museum Usage Patterns By Utilizing Social Media Data*. Phoenix, AZ: Environmental Design Research Association (EDRA).

24. Liu,P., **Song, Y.,** Powers,M. (2019). *Calculating Space: A Design Framework Based on Behavior Mapping and Connectivity Measures*. New York, NY: Environmental Design Research Association (EDRA).

25. **Song, Y.,** Fischer, D. (2019). *Reveal the Urban Waterfront Visiting Experiences By mapping the views and Attractions through Instagram Data*. New York, NY: Environmental Design Research Association (EDRA).

26. Fischer, D., Montoya, C., **Song, Y**.(2019). *Utilizing Two-dimensional Path of Travel Prediction Software to Optimize Desirable and Efficient Infill of Declining Shopping Mall Sites*. Davis, California: 2019 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

27. Maghlakelidze, M., Jiang, S., **Song, Y.,** Li, D. (2019). *Nature at Playground and the Impacts on Children Play Behaviors: A Comparative Case Study*. Davis, California: 2019 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

28. Liu,P, **Song, Y.,** Powers,M. (2019). *The Integration of Behaviors Mapping and Connectivity measures: A New*

Method for Interpreting Healthcare Environments. Davis, California: 2019 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

29. Zhang, B., **Song, Y.** (2019). *New Lessons Learnt on Water Landscape Design by Using Crowdsourcing Data: An Study on Fort Worth Water Gardens*. Davis, California: 2019 Annual Conference of the Council of Educa- tors in Landscape Architecture (CELA).

30. **Song, Y.,** Lecy, E., Fischer, D. (2019). *Machine Learning from Las Vegas: Analyzing Big Dataset of Online Reviews for Improved Place-making Guidelines*. Davis, California: 2019 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

31. **Song, Y.,** Davis-Kollman, M. (2019). *Oil Spill Armature: Creating Resilient Tribal Community Through Hydraulic Modeling and Conservation Planning*. Davis, California: 2019 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

32. **Song, Y.,** Fischer, D. (2018). *Identifying Superior Connections: Using Hyper-Local Data Aggregation Tools for Sense of Place Assessment in Duluth*, MN. Oklahoma City, OK: Environmental Design Research Association (EDRA).

33. **Song, Y.,** Fernandez, J. (2018). *Mapping the urban activity patterns: using social media data as a tool for data collection and design development*. Oklahoma City, OK: Environmental Design Research Association (EDRA).

34. Fernandez, J., **Song, Y**. (2018). *Placemaking in the built environment: A multi-case study of sense of place and landscape character*. Oklahoma City, OK: Environmental Design Research Association (EDRA).

35. Fernandez, J., **Song, Y.** (2018). *An Approach to Identifying Landscape Character at the Campus Community Edge*. Blacksburg, Virginia: 2018 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

36. **Song, Y.,** Fernandez, J., Kirkwood, M. (2018). *Finding invisible patterns: The use of a big data approach to explore urban activity*. Blacksburg, Virginia: 2018 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

37. **Song, Y.,** Powers, M. (2018). *Learning math in landscapes: an experiment on the effects of Landscape Manipulatives*. Blacksburg, Virginia: 2018 Annual Conference of the Council of Educators in Landscape Architecture (CELA).

38. **Song, Y.,** Kirkwood, M. (2018). *Great Plains Analytical Approach of Habitat Suitability and Connectivity Analysis of Road Fencing*. Washington, D.C: TRB(transportation research board) 97th Annual Meeting.

39. **Song, Y.,** Fernandez, J. (2017). *Two Case Studies on Implementing the Parametric Design Method in Landscape Architecture*. Madison, WI: Environmental Design Research Association (EDRA).

40. **Song, Y.,** Powers, M. (2016). *Landscape Manipulatives: A Study of Mathematics Gardens and Learning Outcomes*. Raleigh, NC: Environmental Design Research Association (EDRA).

41. **Song, Y.,** Powers, M. (2015). *Landscape Manipulatives: Learning Middle School Mathematics Through Learn- ing Landscapes*. Clemson, SC : 2015 Conference on the Value of Play.

42. Powers, M., **Song, Y.** (2014). *Maximizing the benefits: A framework for integrating learning theories into "learning landscape" design.* New Orleans, LA: Environmental Design Research Association (EDRA).

43. Powers, M., **Song, Y.** (2014). *A Framework for Integrating Educational Theory into Learning Landscape Design.* Clemson, SC : 2014 Conference on the Value of Play.

TEACHING EXPERIENCE

Course Taught

Texas A&M University
1. LAND 212 LANDSCAPE DESIGN II (Spring 2021-2022)
   - Grading and drainage in Landscape Architecture at Undergrad level
2. LAND 232 LANDSCAPE CONSTRUCTION II (Spring 2021-2023)
   - Grading and drainage in Landscape Architecture at Undergrad level
3. URPN 220 DIGITAL COMMUNICATION I (Fall 2022-2023)
   - Computer aided design at Undergrad level
4. LAND 231/612 LANDSCAPE CONSTRUCTION I (Fall 2020-2021)
   - Materials and structures in Landscape Architecture at both Undergrad and Grad level
5. URPN 325 INTRO GIS IN URBAN PLAN (Fall 2021)
   - GIS concepts and applications at Undergrad level
6. LAND 601 LAND ARCH DESIGN THEORY AND APPLICATION I (Fall 2022-2023)
   - First MLA design studio at Grad level

North Dakota State University
7. Arch 323 DIGITAL TECHNOLOGY FOR ARCHITECTURE (Spring 2019-2020)
   - Software tools about modelling, graphic design, architectural documentation;
8. LA 331 ADVANCED DIGITAL TECHNOLOGY (Fall 2019)
   - Advanced digital applications in Revit, Rhino, and Grasshopper;
9. LA 341 SITE DEVELOPMENT AND DETAILING I (Fall 2017)
   - Grading and drainage in Landscape Architecture (Civil3D, Revit); Site construction;
10. LA 342 SITE DEVELOPMENT AND DETAILING II (Fall 2018-2019)
    - Stormwater management and Site hydrology; Construction technologies;
11. LA 371 SITE PLANNING & DESIGN STUDIO (Fall 2017)
    - Site dynamics; Landscape projects at the site level;
12. LA 571 ENVIRONMENTAL PLANNING (Spring 2018-2019)
    - Geodesign; GIS Technology; Landscape ecology theories;
13. LA 272 OPEN SPACE DESIGN (Spring 2020)
    - Design of urban public spaces; Form making;
14. LA 771 PERFORMANCE BASED DESIGN (Fall 2018-2019)
    - Ecological design; Site systems; Parametric design

Clemson University

15. LARC 2620/2621 DESIGN IMPLEMENTATION I (Fall 2016)
    - Theories and technologies(Civil3D) of grading and drainage in Landscape Architecture;
16. LARC 3510/8130: ADVANCED REGIONAL DESIGN AND ECOLOGY (Fall 2013-2016)
    - Introduction to theories in Landscape ecology and Geodesign; GIS technology and applications
17. LARC 4280/4281/6280/6281: COMPUTER AID DESIGN (Spring 2017)
    - Digital media and Landscape representation

Teaching Schedule

Texas A&M University							
Year	Semester	Course	Title	Mode	Enrollment	Evaluation Score (AEFIS #Q8)	Credit
2020	Fall	LAND 231/612	LANDSCAPE CONSTRUCTION I	Co-Teach	28	4.88	4
2021	Spring	LAND 232	LANDSCAPE CONSTRUCTION II	Co-Teach	19	5	3
2021	Spring	LAND 212	LANDSCAPE DESIGN II	Co-Teach	19	4.7	4
2021	Fall	URPN 325	INTRO GIS IN URBAN PLAN	Sole	7	5	3
2021	Fall	LAND 231/612	LANDSCAPE CONSTRUCTION I	Co-Teach	39	4.72	4
2022	Spring	LAND 212	LANDSCAPE DESIGN II	Co-Teach	27	5	4
2022	Spring	LAND 232	LANDSCAPE CONSTRUCTION II	Co-Teach	27	4.68	3
2022	Fall	LAND 601	LAND ARCH DESIGN THEORY AND APPLICATION I	Sole	4	4	5
2022	Fall	URPN 220	DIGITAL COMMUNICATION I	Sole	30	4.67	3
2023	Spring	LAND 232	LANDSCAPE CONSTRUCTION II	Co-Teach	27	4	3
2023	Fall	LAND 601	LAND ARCH DES THRY APP I	Co-Teach	12	4	5
2023	Fall	URPN 220	DIGITAL COMMUNICATION I	Sole	46	4.53	3
					Average	4.60	

North Dakota State University					
Year	Semester	Course	Title	Mode	Credit
2017	Fall	LA 341	SITE DEVELOPMENT AND DETAILING I	Sole	4
2017	Fall	LA 371	SITE PLANNING & DESIGN STUDIO	Sole	6
2018	Spring	LA 571	ENVIRONMENTAL PLANNING	Sole	4
2018	Fall	LA 342	SITE DEVELOPMENT AND DETAILING II	Sole	4
2018	Fall	LA 771	PERFORMANCE BASED DESIGN	Sole	6
2019	Spring	LA 571	ENVIRONMENTAL PLANNING	Sole	6
2019	Spring	ARCH 323	DIGITAL TECHNOLOGY FOR ARCHITECTURE	Sole	3
2019	Fall	LA 771	PERFORMANCE BASED DESIGN	Sole	6
2019	Fall	LA 342	SITE DEVELOPMENT AND DETAILING II	Sole	4
2020	Spring	LA 272	OPEN SPACE DESIGN	Sole	6

2020	Spring	ARCH 323	DIGITAL TECHNOLOGY FOR ARCHITECTURE	Sole	3

Clemson University					
Year	Semester	Course	Title	Mode	Credit
2013	Fall	LARC 3510/8130	ADVANCED REGIONAL DESIGN AND ECOLOGY	Co-Teach	6
2014	Fall	LARC 3510/8130	ADVANCED REGIONAL DESIGN AND ECOLOGY	Co-Teach	6
2015	Fall	LARC 3510/8130	ADVANCED REGIONAL DESIGN AND ECOLOGY	Sole	6
2016	Fall	LARC 3510/8130	ADVANCED REGIONAL DESIGN AND ECOLOGY	Sole	6
2016	Fall	LARC 2620/2621	DESIGN IMPLEMENTATION I	Sole	4
2017	Spring	LARC 4280/6280	COMPUTER AID DESIGN	Sole	4

Graduate/Ph.D. Committees

Texas A&M University				
Year	Name	Program	Type	Role
Current	Matthew Faust	Mathmatics	Ph.D.	Member
Current	Urvi Joshi	Landscape Architecture	MLA	Member
Current	Yeankyoung Hahm	Urban & Regional Sciences	Ph.D.	Member
Current	Li Deng	Urban & Regional Sciences	Ph.D.	Member
Current	Yinglan Hao	Landscape Architecture	MLA	Chair
Current	Haoyue Yang	Urban & Regional Sciences	Ph.D.	Member
Current	Jiwoon Jeong	Urban & Regional Sciences	Ph.D.	Member
2023	Rui Zhu	Urban & Regional Sciences	Ph.D.	Member
2023	Zhihan Tao	Urban & Regional Sciences	Ph.D.	Member
2023	Haoshen Li	Mathmatics	Master of Science	Member
2022	Xinke Huang	Urban Planning	MUP	Co-Chair
2022	Quanli Du	Landscape Architecture	MLA	Co-Chair
2022	Tess Menotti	Landscape Architecture	MLA	Co-Chair
2022	Adolfo Gonzalez	Urban Planning	MUP	Member
2021	Yerim Lee	Urban Planning	MUP	Member

North Dakota State University				
Year	Name	Program	Type	Role
2019	Morgan Kollman	Landscape Architecture	MLA	Chair
2019	Evan Lecy	Landscape Architecture	MLA	Chair

Teaching Innovations and Enhancement

1. 2017-Current   A YouTube Channel about Digital Technologies in Landscape Architecture
The channel, which focuses on providing supplementary course material and Digital LA skills, has garnered 1.45k followers and 424k views from around the world.

2. 2019-2020   Gateways-ND Cohort ($4000)
A NSF-funded, two-year professional development and research activities meant to transform STEM (and beyond) teaching and learning at North Dakota State University.

Student development

2023   Haoyue Yang   Academy of Future Faculty (AFF) program, Texas A&M University
2023   Rui Zhu   Academy of Future Faculty (AFF) program, Texas A&M University
2022   Jeongseup Lee Academy of Future Faculty (AFF) program, Texas A&M University

INVITED LECTURES / WORKSHOPS/ REVIEWS

External Talks and Review

1. 2023.07   Wuhan Institute of Technology, Academic Workshop
2. 2023.04   University of Texas at Austin, SMART CITIES CONSORTIUM, https://www.youtube.com/watch?v=-joIzS2uvAI
3. 2021.06   Youth Program with High School students in Zapata and Rio Grande City, TX
4. 2020.08   Summer Studio Review Atlanta Beltline Redesign, College of Environment + Design, University of Georgia
5. 2019.06   Parametric Design in Landscape Architecture, Shanghai Institute of Technology, China
6. 2019.07   Data Driven Research in Landscape Architecture, Huazhong Agricultural University, China
7. 2019.07   Big Data Research Using Social Media, Huazhong University of Science and Technology, China
8. 2019.07   Landscape Architecture Trends at the Digital Age, Wuhan Gardens Construction Planning Design Institute, China

Lectures

1. F2023   URSC 681 Ph.D Research in Landscape Architecture (invited talk), Department of Landscape Architecture and Urban Planning, Texas A&M University
2. S2022   LAND 241 Social media in landscape architecture (invited talk), Department of Landscape Architecture and Urban Planning, Texas A&M University
3. S2022   Data Driven estimation of heat related causal effects on park use (invited talk), Microclimatic Design Research Group (MDRG), Texas A&M University
4. F2021   Big Data and landscape architecture (invited talk), Microclimatic Design Research Group (MDRG), Texas A&M University
5. F2021   URPN 325-501 GIS application and modern technologies (invited talk), Department of Landscape Architecture and Urban Planning, Texas A&M University
6. F2020   Greet and Meeting (invited talk), Center of health and design, Texas A&M University
7. F2020   LAND 101 Intro to Landscape Architecture and Urban Planning, Department of Landscape Architecture and Urban Planning, Texas A&M University
8. F2018   Site Systems and Parametric Design (invited lecture), Dept. of Architecture and Landscape Arch, North Dakota State University
9. S2018   Key Concepts in Site Grading, Dept. of Architecture and Landscape Arch, North Dakota State University
10. S2018   Visibility Analysis in Urban Design, Governor School, North Dakota State University
11. F2017   Social Media Research in Landscape Architecture, Dept. of Architecture and Landscape Arch, North Dakota State University
12. F2017   An In-depth Look at Site Analysis, Dept. of Architecture and Landscape Arch, North Dakota State University
13. F2016   How To Develop a Good Master's Thesis, Dept. of Landscape Architecture, Clemson University
14. F2015   Research design in Landscape Architecture, Dept. of Landscape Architecture, Clemson University

15. S2015   Public Presentation on "Landscapes Manipulatives", Planning Design and Build Environment, Clemson University

Workshops and Reviews
1. S2023   ULI Student Competition Faculty advisor (invited), College of Architecture, Texas A&M University
2. S2022   Final Review (invited), LAND312, College of Architecture, Texas A&M University
3. S2022   The annual Harold Adams-Interdisciplinary Charrette for Undergraduates (HA-ICU) Competition, College of Architecture, Texas A&M University
4. S2021   Final Review(invited), LAND 311, Texas A&M University
5. S2021   Final Review(invited), LAND 602/URPN 493, Texas A&M University
6. F2020   Final Review for Landscape Design III (invited), LAND311 - Landscape Design III, Texas A&M University
7. F2020   Final Review for Landscape Theory (invited), LAND301 - Landscape architecture theory, Texas A&M University
8. F2020   Rhino 3D and Landscape Architecture (invited talk), TAMU Student ASLA, Texas A&M University
9. S2018   Digital Graphics in LA Design. Dept. of Architecture and Landscape Arch, North Dakota State University
10. S2017   Creating Base Maps using Grasshopper, Dept. of Landscape Architecture, Clemson University
11. F2016   Parametric Design and Landscape Modeling, Dept. of Landscape Architecture, Clemson University
12. F2016   Undergrad Exist Project Advising, UnderGrad Exist Studio, Dept. of Landscape Architecture, Clemson University
13. F2014   Suitability Analysis Using ArcGIS, Dept. of Landscape Architecture, Clemson University

ACADEMIC & PROFESSIONAL SERVICES

Texas A&M University
1. 2023 Fall   ASCEND Targeted Proposal Teams (TPT) 2023 grant review
2. 2020 -Current   LAND Committee member
3. 2020 -Current   LAND Digital and Tech Committee Chair
4. 2023 -Current   Working Group for Urban Analytics and Informatics
5. 2023 -Current   Vice Director of Microclimatic Design Research Group (MDRG)
6. 2021 -Current   Fellow of Center for Housing & Urban Development
7. 2022 -Current   Affiliation of Center for population health & aging
8. 2023   LAND Search Committee (Successful)
9. 2022   PLAN Search Committee (Successful)
10. 2022   LAND Search Committee (Successful)
11. 2022   LAUP Department Chair Search Committee (Successful)
12. 2022   LAND Department Appeal Committee

North Dakota State University
1. 2017 -2020   ALA Digital Promotion Director
2. 2018-2020   Creative Means Committee Member
3. 2018-2020   Scholarship Committee Member
4. 2018-2019   Arch Faculty Search Committee Member (unsuccessful)
5. 2017-2018   LA Faculty Search Committee Member (Successful)

Clemson University

1. 2013   Dean's Council of Students
2. 2013-2014   Graduate Student Government Senators

Professional
1. 2023-2024   Special issue editor, Land
2. 2022-2024   Special issue editor, Atmosphere
3. 2018   Fargo Civic Block Development Committee
4. 2018   US Green Building Council ND
5. 2018   Spirit Lake Nation Tourism Board

Peer Review

2023
1. 1 Paper reviewed, Journal of Planning Education and Research
2. 1 Paper reviewed, LAND
3. 3 Paper reviewed, Computational Urban Science

2022
4. 1 Paper reviewed, LAND
5. 1 Paper reviewed, Landscape Research
6. 1 Paper reviewed, Atmosphere
7. 2 Paper reviewed, Landscape Architecture Research Record
8. 1 Paper reviewed, Applied Geography
9. 1 Paper reviewed, Computational Urban Science
10. 1 Paper reviewed, Journal of Planning Education and Research
11. 1 Paper reviewed, Sustainability

2017-2021
12. 1 Paper reviewed, Sustainability
13. 1 Paper reviewed, Landscape and Urban Planning
14. 1 Paper reviewed, Environment and Planning B: Urban Analytics and City Science
15. 1 Paper reviewed, Landscape and Urban Planning
16. 1 Paper reviewed, Computational Urban Science
17. 1 Paper reviewed, Transactions in GIS
18. 1 Paper reviewed, Sustainability MDPI
19. 1 Book Proposal reviewed, Routledge
20. 1 Full Paper reviewed, Journal of SAGE Open

Media Contributions
1. 02/02/2020 , "2019 ASLA RESEARCH AWARD OF HONOR: Using Social Media Data to Understand Site-Scale Landscape Architecture Design: A Case Study of Seattle Freeway Park", https://www.gooood.cn/2019-asla-research-award-of-honor-using-social-media-data-to-under- stand-site-scale-landscape-architecture-design-a-case-study-of-seattle-freeway-park-bo-zhang-and-yang- song.htm

2. 10/2019. "Honor Award: Using Social Media Data to Understand Site-Scale Landscape Architecture Design: A Case Study of Seattle Freeway Park", Landscape Architecture Magazine.

3. 11/2019. "ASLA Honor Award|Research", American Society of Landscape Architects, https://www.asla.org/2019awards/629092-Using_Social_Media_Data_To_Understand_Site.html

4. 06/12/2019. "Identifying goals for Lake Mitchell ", The Daily Republic, https://www.mitchellrepublic.com/news/government-and-politics/4624919-identifying-goals-lake-mitch-ell-%E2%80%94-leaders-public-gather.

5. 10/19/2018. "Faculty participate in award-winning Belfield revitalization project", NDSU News. https://www.ndsu.edu/news/view/detail/35375/.

6. 02/16/2018. "National Park Service + NDSU Landscape Architecture Program Students in Ortonville", MN-bump.com. https://mnbump.com/2018/02/16/national-park-service-ndsu-landscape-architecture-program-stu-dents-in-ortonville/.

7. 02/16/2018. "NPS,NDSU present works done in Ortonville", Ortonville Independent. http://www.ortonvilleindependent.com/Printing.html.

8. 12/12/2017. "Cormorant Park Design Presentation", Lakes Country Connection. http://www.hawleyherald.net/49337/2221/1/home.

Student Sponsorship
1. 2021-2022, Design for rural community development and sustainability scholarship for the 2021-2022 academic year. Funded Graduate student Yinglan Hao

OTHER LEARNING & COMMUNITY ACTIVITIES

Engagement
1. 2021 Summer, Landscape Architecture design and social media, Zapata High school, TX, Invited to present a lecture about Landscape Architecture design for middle school students in Zapata, TX.

2. 2020 Fall, Stormwater management in American Cities, TAMU Chinese School, Invited to present a lecture about stormwater management for middle school students in TAMU Chinese School.

3. 2021 Spring, Test ZERO+ (a game that aims to reduce carbon emissions from buildings), University of Minnesota College of Design, Work with Professor Malini and her team to test an energy education game.

Service Projects
1. 2024   "Southeast park planning and design" Sponsored by City of College Station
2. 2022   "Fairport farm property planning and design" Sponsored by Jodi Simons
3. 2022   "Jones Park Design" with Vision of Galveston
4. 2022   "Rio Grande City, TX design and development" Sponsored by Texas Target Communities
5. 2021   "Caldwell, TX downtown urban design" Sponsored by Texas Target Communities
6. 2018   "Dakota Trail Planning and Design, Fort Totten, ND" Sponsored by North Dakota Parks and Recreation Department, National Park Service, $901.00.
7. 2018   "Park and Trail System Planning, Ortonville, MN" Sponsored by City of Ortonville,MN and National Park Service, $800.00.
8. 2018   "Cormorant Park Design, Cormorant, MN" Sponsored by Cormorant Township,MN, $750.00.

Learning Certificates
1. 2019.06   Beyond Complete Streets for Walking and Biking, Planetizen Courses (https://courses.planetizen.com/completion-certificate/vt6-yug-6iw-stq)

2. 2018.12 Economic Impact Analysis in Land Use Planning, Planetizen Courses (https://courses.planetizen.com/completion-certificate/tz6-j2q-dbp-bpg)
3. 2018.12 Calculating the Benefits of Parks, Trails, and Open Space, Planetizen Courses (https://courses.planetizen.com/completion-certificate/fae-86l-28p-pbs)
4. 2018.07 Deep Learning Specialization, Coursera deeplearning.ai (https://www.coursera.org/specializations/deep-learning)
5. 2018.07 Neural Networks and Deep Learning, Coursera deeplearning.ai (https://www.coursera.org/learn/neural-networks-deep-learning)
6. 2018.07 Structuring Machine Learning Projects, Coursera deeplearning.ai (https://www.coursera.org/learn/machine-learning-projects)
7. 2018.07 Improving Deep Neural Networks, Coursera deeplearning.ai (https://www.coursera.org/learn/deep-neural-network)
8. 2018.07 Convolutional Neural Networks, Coursera deeplearning.ai (https://www.coursera.org/learn/convolutional-neural-networks)
9. 2018.07 Sequence Models, Coursera deeplearning.ai (https://www.coursera.org/learn/nlp-sequence-models)
10. 2017.10 GIS Certificate (ArcGIS Pro, Python Scripting), ESRI Academy (https://www.esri.com/training/)
11. 2015.05 Foundations of Business Strategy, Coursera University of Virginia (https://www.coursera.org/learn/uva-darden-foundations- business-strategy)
12. 2014.10 PH201x: Health and Society, edX Harvard University (https://www.edx.org/course/health-society-harvardx-ph201x)