#### **Curriculum Vitae**

# Yuliya Dzyuban

ydzyuban@pratt.edu yuliya.dzyuban@fulbrightmail.org https://orcid.org/0000-0003-3688-420X

# I. ACADEMIC BACKGROUND

**Doctor of Philosophy in Sustainability** - School of Sustainability, Arizona State University, Tempe, AZ. Awarded: December 2019. Committee: Charles L. Redman (chair), David M. Hondula, Paul J. Coseo **Dissertation Title:** "Relationship between design and thermal comfort in hot and dry climate."

Master of Science in Sustainability in the Urban Environment - The Bernard and Anne Spitzer School of Architecture, The City College of the City University of New York, New York, NY. Awarded: February 2015. Advisor: Jorge E. Gonzalez

**Thesis Title:** "An Analysis of Resilient Strategies for Coastal Communities: The Case of Staten Island's Eastern Shore."

**Professional Diploma in Architecture (Summa Cum Laude) -** Department of Architecture, University of Nicosia, Nicosia, Cyprus. Awarded: June 2012

**Bachelor of Architecture (with Honors) -** Department of Architecture, Poltava National Technical Yurii Kondratyuk University, Poltava, Ukraine. Awarded: January 2010

## II. RESEARCH ACTIVITIES

# PROFESSIONAL APPOINTMENTS

## **Assistant Professor, Sustainable Environmental Systems**

Graduate Center for Planning and the Environment, Pratt Institute, New York, 01/2024 -

## Postdoctoral Research Fellow for Cooling Singapore Project

College of Integrative Studies, Singapore Management University, Singapore, 02/2020 – 01/2024

#### Ph.D. Research Fellow for UREx SRN

Urban Resilience to Extremes Sustainability Research Network (UREx SRN), Arizona State University, Tempe, AZ, 08/2016 – 12/2019

#### Research Fellow for RULA IRES

Resilient Urban Latin America (RULA) International Research Experience for Students (IRES) Program, Arizona State University, Hermosillo, Mexico, 05/2019 – 07/2019

## Research Intern for Building Performance Lab

Institute for Urban Systems, City University of New York, New York, NY, 04/2014 – 12/2014

#### RESEARCH INTERESTS

Urban design Environmental justice Outdoor thermal comfort Heat perceptions Resilience to weather extremes Sustainable mobility

# ACADEMIC FELLOWSHIPS SCHOLARSHIPS, AND AWARDS (totaling \$267,763 plus three years of Research Fellowship with UREx SRN)

**Research Staff Excellence Award -** S\$2000, Singapore Management University, Singapore, 2022

**Graduate College Completion Fellowship** - \$8,500 plus tuition coverage, Arizona State University, Tempe, AZ, 2019

Graduate Research Grant - \$2,000, UREx SRN, 2019

**Graduate and Professional Student Association Out-of-State Career Development Grant** - \$550, Arizona State University, Tempe, AZ, 2019

**Graduate Fellow Award** to conduct research in Hermosillo, Mexico - \$6,000 plus travel and lodging, UREx SRN, Tempe, AZ, 2019

Second prize at CAP LTER Poster Symposium - \$250, Arizona State University, 2019 Graduate Research Grant - \$4,000, UREx SRN, Tempe, AZ, 2018-2019

**Planning Scholarship** - \$2,500, Advancing Women in Transportation Metropolitan Phoenix Chapter and Arizona Transit Association, Phoenix, AZ, 2018

**Second prize at Reimagining Transportation Contest -** \$2,000, Friends of Transit 15th and 16th Annual Conference, Phoenix, AZ, 2017-2018

**Graduate and Professional Student Association Individual Travel Grant** - \$275, Arizona State University, Tempe, AZ, 2017

**Ray Anderson Memorial Scholarship** - \$1,000, School of Sustainability, Arizona State University, Tempe, AZ, 2017

**Martinson Sustainability Solutions Research Grant** - \$500, School of Sustainability, Arizona State University, Tempe, AZ, 2017

**First prize at Project-Wide Poster Session**, UREx SRN 2nd Annual All Hands Meeting, New York, NY, 2017

**Fulbright Graduate Student Award** - \$232,788, Embassy of the United States of America in Ukraine and Fulbright Program, Kyiv, Ukraine, 2013-2016

**Award for Great Academic Performance** for year 2011-2012 during studying in University of Nicosia, Scientific and Technical Chamber of Cyprus, Nicosia, Cyprus, 2012

**State Scholarship** for pursuing Bachelor of Architecture - \$6,000 plus tuition coverage, Poltava National Technical Yurii Kondratyuk University, Poltava, Ukraine, 2005-2010

# **PUBLICATIONS**

Google Scholar: https://scholar.google.com/citations?hl=en&user=mHRpRAUAAAAJ

# **Peer-Reviewed Journal Manuscripts**

Banerjee, S., Ching, G. N.Y., Yik, S.K., **Dzyuban, Y.**, Crank, P.J., Pek, R.X.Y., Chow, W.T.L. (2022). Analyzing impacts of urban morphological variables and density on outdoor microclimate for tropical cities: A review and a framework proposal for future research directions. *Building and Environment*, 225(October), 109646. https://doi.org/10.1016/j.buildenv.2022.109646

**Dzyuban Y.**, Ching, G. N.Y., Yik, S.K., Tan, A.J., Crank, P.J., Banerjee, S., Pek, R.X.Y., Chow, W.T.L. (2022). Sentiment Analysis of Weather-Related Tweets from Cities within Hot Climates. *Weather Climate and Society.* 14(4), 1133-1145. https://doi.org/10.1175/WCAS-D-21-0159.1

**Dzyuban Y.**, Ching, G. N.Y., Yik, S.K., Tan, A.J., Banerjee, S., Crank, P.J., Chow, W.T.L. (2022). Outdoor thermal comfort research in transient conditions: a narrative literature review. *Landscape and Urban Planning*, *226*(May), 104496 https://doi.org/10.1016/j.landurbplan.2022.104496

**Dzyuban, Y.**, Hondula, D. M., Vanos, J. K., Middel, A., Coseo, P. J., Kuras, E. R., & Redman, C. L. (2022). Evidence of alliesthesia during a neighborhood thermal walk in a hot and dry city. *Science of the Total Environment*, 834. https://doi.org/10.1016/j.scitotenv.2022.155294

Lees A.M., Vecellio D.J, **Dzyuban Y**. (2021). A news update from the students and new professionals group. *International Journal of Biometeorology*. https://doi.org/10.1007/s00484-021-02203-z

**Dzyuban, Y.**, Hondula, D. M., Coseo, P. J., & Redman, C. L. (2021). Public transit infrastructure and heat perceptions in hot and dry climates. *International Journal of Biometeorology*. https://doi.org/10.1007/s00484-021-02074-4

Anderson, V., Leung, A. C. W., Mehdipoor, H., Jänicke, B., Milo, D., Oliveira, A., Manavvi, S., Kabano, P., **Dzyuban, Y.**, Aguilar, R., & Agan, P. N. (2021). Technological opportunities for sensing of the health effects of weather and climate change: a state-of-the-art-review. *International Journal of Biometeorology*. https://doi.org/10.1007/s00484-020-02063-z

# **Data publications**

**Dzyuban, Y.,** D. Hondula, J. Vanos, A. Middel, P. Coseo, and C. Redman. (2022). Evidence of alliesthesia during a neighborhood thermal walk in a hot and dry city (Phoenix, Arizona) ver 1. Environmental Data Initiative.

https://doi.org/10.6073/pasta/f969758e0aa62163f674464d68acdaaf

**Dzyuban, Y.** (2020). Public transit infrastructure and heat perceptions in hot and dry climates (June-July, 2018; Phoenix, Arizona, USA) ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/340aa9e1326acaa5031b6f5a55a1f29e

## **Gray literature publications**

**Dzyuban, Y.** (2020). Relationship between humidity and physiology in warm and humid conditions – A literature review. *Research Collection School of Social Sciences*. Paper 3237. <a href="https://ink.library.smu.edu.sg/soss">https://ink.library.smu.edu.sg/soss</a> research/3237

#### **CONFERENCE PRESENTATIONS**

**Dzyuban Y.**, Banerjee S., Ching, G. N.Y., Yik, S.K., Pek, R.X.Y., Chow, W.T.L. Assessment of the relationship between the urban form and thermal comfort in a tropical city. APRU Multi-Hazards Symposium 2023, Singapore, November 2023

**Dzyuban Y.**, Banerjee S., Ching, G. N.Y., Yik, S.K., Pek, R.X.Y., Chow, W.T.L. Thermal walk for outdoor thermal comfort evaluation of urban spaces in an Asian city. 11<sup>th</sup> International Conference on Urban Climate, Sydney, Australia, September 2023

**Dzyuban Y.**, Banerjee S., Ching, G. N.Y., Yik, S.K., Pek, R.X.Y., Chow, W.T.L. Thermal walk for outdoor thermal comfort evaluation of urban spaces in an Asian city. International Congress of Biometeorology 2023, Tempe, AZ, May 2023

**Dzyuban Y.**, Redman C., Hondula D., Coseo P., Middel A., Vanos J. Exploring pedestrian thermal comfort in hot climates. The European Geoscience Union General Assembly, Online, May 2020

**Dzyuban Y.**, Hondula D., Messerschmidt M., Vanos J., Middel A., Coseo P. Heat Walk: Perception of Thermal Comfort in Relation to Street Infrastructure. American Meteorological Society 100th Meeting, Boston, MA, January 2020

**Dzyuban Y.** Heat Adaptation Research Panel. Heat, Air, Water Workshop. Arizona State University, Tempe, AZ, February 2019

**Dzyuban Y,** Hondula DM, Middel A. Analyzing public transit-based heat exposure, perception, and behaviors to enhance climate adaptation and mitigation strategies in the Southwest United States. American Meteorological Society 99th Meeting, Phoenix, AZ, January 2019

**Dzyuban Y,** Hondula DM, Redman C, Middel A. Analyzing transit-based heat exposure and behaviors to enhance urban climate adaptation and mitigation strategies in the Southwest USA. 11th International Forum on Urbanism (IFOU) 2018 Reframing Urban Resilience Implementation: Aligning Sustainability and Resilience, The School of Architecture of UIC Barcelona and UNHabitat, Barcelona, Spain, December 2018

**Dzyuban Y.** Public transit and heat. Cooler Phoenix Research Symposium. Arizona State University and the City of Phoenix, Phoenix, AZ, September 2017

## CONFERENCES AND SESSIONS ORGANIZED

Organized and moderated the First Virtual Asia Biometeorology Colloquium 2023, January 2023

Co-organized (on a leadership team) the 1st virtual and 22nd International Congress of Biometeorology, Connecting Our World: Biometeorology 2021, September 2021

Session chair, Biomet – Asia, Virtual International Congress of Biometeorology, Connecting Our World: Biometeorology 2021, September 2021

Poster session chair, Human - Asia I and II: Poster Review and Discussion, Virtual International Congress of Biometeorology, Connecting Our World: Biometeorology 2021, September 2021

Co-organized and moderated a session on The MICROtransit: Building Community as You Go. Arizona's 31st Annual Transit Conference, Tucson, AZ, April 2018

## **INVITED TALKS**

"Designing cooler cities. Assessing thermal environment and perception for improved livability." Presented to the Yale School of the Environment, Yale, virtual, March 2022

"Assessing the impact of urban forestry for cooler and livable cities." Presented to the Department of Forest Resources Management, University of British Columbia, virtual, March 2023

## **POSTERS**

**Dzyuban, Y.**, Hondula, D. M., Vanos, J. K., Middel, A., Coseo, P. J., Kuras, E. R., & Redman, C. L. Evidence of alliesthesia during a neighborhood thermal walk in a hot and dry city. International Association for Urban Climate Virtual Poster Conference, August 2022

Crank, P.J., Ching, G. N.Y., **Dzyuban Y.**, Banerjee S., Yik, S.K., Pek, R.X.Y., Chow, W.T.L. Transforming the City into a Garden: Simulating the cooling effects of vegetation in tropical Singapore on ENVI-met. International Association for Urban Climate Virtual Poster Conference, August 2022

Yik, S.K., Ching, G. N.Y., Pek, R.X.Y., Crank, P.J., **Dzyuban Y.**, Banerjee S., Chow, W.T.L. Shady Results: The Impact of Solar Radiation Shields on Measuring Urban Heat Parameters in Sultry Climates. International Association for Urban Climate Virtual Poster Conference, August 2022

Ching, G. N.Y., Yik, S.K., Tan A. J., **Dzyuban Y.**, Crank, P.J., Banerjee S., Chow, W.T.L. Sentiment Analysis of Weather-related Tweets in Hot Climates. Virtual International Congress of Biometeorology, Connecting Our World: Biometeorology 2021, September 2021

**Dzyuban Y**, Messerschmidt M, Fischer H, Ellsworth A, Solis P, Vanos J, Middel A, Hondula DM. Mapping thermal comfort in Edison Eastlake Neighborhood with citizen scientists. Central Arizona–Phoenix Long-Term Ecological Research Symposium, Scottsdale, AZ, January 2019

**Dzyuban Y,** Hondula DM, Redman C, Middel A. Analyzing transit-based heat exposure and behaviors to enhance urban climate adaptation and mitigation strategies in the southwest USA. Central Arizona–Phoenix Long-Term Ecological Research Symposium, Scottsdale, AZ, January 2019

**Dzyuban Y.** The relationship of urban design and microclimate in influencing behavior to mitigate heat exposure on public transit stops in Phoenix Metro Area. Recommendations for Tempe Streetcar Project. Urban Resilience to Extremes Sustainability Research Network (UREx SRN) All-Hands Meeting, New York, NY, March 2017

**Dzyuban Y**, Guardaro M, Hobbins RJ, Jones JL and Stein Z. Healthy fire station complex. Institute for Social Science Research Poster Competition, Arizona State University, November 2016

#### **MEDIA**

Singapore Management University Office of Research: "Mitigating heat impacts for cooler cities", May 2023, https://research.smu.edu.sg/news/2023/feb/09/mitigating-heat-impacts-coolercities

The Straits Times Singapore: "LTA, NParks plant a cool idea at bus stops islandwide", September 2022, https://www.straitstimes.com/singapore/transport/lta-nparks-plant-a-cool-idea-at-bus-stops-islandwide

The New York Times: "How Hot and Humid Singapore Is Trying to Cool Itself Down", August 2022, https://www.nytimes.com/2022/08/01/world/asia/singapore-cooling-heat-climate.html

The Straits Times Singapore: "Is weather app accurate? SMU researchers eye better way to measure urban heat", July 2022, https://www.straitstimes.com/singapore/environment/is-weather-app-accurate-smu-researchers-eye-better-way-to-measure-urban-heat?close=true

Future cities episode 68: "Heat Risk", August 2022, https://www.stitcher.com/show/future-cities/episode/heat-risk-205402184

Tomorrow City - S1E2: "Sun". August 2021. https://www.channelnewsasia.com/watch/tomorrow-city/sun-2129581

Future cities episode 21: "Resilience to heat and floods in Hermosillo, Mexico", August 2019. https://sustainability-innovation.asu.edu/urbanresilience/news/archive/future-cities-episode-21-resilience-to-heat-and-floods-in-hermosillo-mexico

Future cities episode 17: "Perceptions of Heat and thermal comfort", February 2019. https://sustainability-innovation.asu.edu/urbanresilience/news/archive/future-cities-episode-17-perceptions-of-heat-and-thermal-comfort

ABC 15 Morning News, "Tracking heat, cooling cities down", October 2018

# III. TEACHING, SUPERVISION, AND MENTORSHIP

## **COURSES TAUGHT**

Assistant Professor, Green Infrastructure Design/Build Studio, SES Pratt Institute, Spring 2024 Assistant Professor, Demo Professional Competence, SES Pratt Institute, Spring 2024 Adjunct Faculty, 200-level "Climate Change: Local to Global Solutions" at Singapore Management University, Fall 2023

**Invited Lecturer**, "Urban Resilience for Redesigning Deltas", PhD students at the Department of Urbanism, Delft, Fall 2023

**Invited Lecturer,** "Assessing the Relationship Between Urban Morphology and Thermal Comfort", MS students at the Department of Urbanism, Delft, Fall 2023

**Invited Lecturer,** "Ecosystem Services for Urban and Peri-Urban Climate Resilience", Urban Forestry Capstone students, University of British Columbia, Fall 2023

**Invited Lecturer,** "Scientific poster development", Sustainability Research Design and Practice undergraduate class, Arizona State University, Spring 2020, 2021

**Teaching Assistant**, Landscape Architecture III Design Studio, Arizona State University School of Design, Tempe, AZ, Fall 2017, 2018, 2019

#### STUDENTS SUPERVISED

## **Completed graduate capstone advisees**

Aditi Galande, M.Sc Sustainable Environmental Systems (SES), Pratt Institute, Spring 2024 Nicole Saul Nigri, M.Sc SES, Pratt Institute, Spring 2024 Raísa Lin Garden-Lucerna, M.Sc SES, Pratt Institute, Spring 2024 Radhika Darshakbhai, M.Sc SES, Pratt Institute, Spring 2024

# Completed undergraduate thesis advisee (as committee member)

Roxana Sánchez Servin de la Mora, Environmental Science Engineering, Sonora Institute of Technology, Spring 2020

## Completed undergraduate summer researchers supervised

Danielle Prasad, BA in Sustainability, Arizona State University, Summer 2021 Claire Kredens, BSLAS in Earth, Society, and Environmental Sustainability and Geography (Human Concentration) University of Illinois at Urbana-Champaign, Summer 2018 Makenna Welsch, BA in Sustainability, Arizona State University, Summer 2017

#### **MENTORSHIP**

**Mentor**, U.S. Embassy Singapore-Institute of Technological Education Alumni Mentoring Program 2021

Job SHARE Mentor, Arizona State University Mentor Network, 2020-present

# IV. PUBLIC SERVICE

#### **GUEST EDITOR**

International Journal of Biometeorology, Special Issue for Students and New Professionals of the International Society of Biometeorology, 2024

#### MANUSCRIPT REVIEWER

Science of the Total Environment	Urban Climate
International Journal of Biometeorology	Building and Environment

Meteorological Applications	Weather, Climate, and Society
Sustainable Cities and Society	PeerJ — the Journal of Life and Environmental Sciences
Nature Communications	

## **BOOK CHAPTER REVIEWER**

Resilient Urban Futures volume, Springer Urban Book Series, 2020

#### OTHER SERVICE ACTIVITIES

Vice-President, International Society of Biometeorology, 2023--

**Communications Director,** Students and New Professionals group of the International Society of Biometeorology, 2020-2023

Councilor for the Asia Region, International Society of Biometeorology, 2020-2023

**Summer Graduate Grant panel reviewer,** Urban Resilience to Extremes Research Network, 2020

**Sustainability Challenge Judge**, Changemaker Community Action Grant, Arizona State University, Tempe, AZ, 2019

Global Classroom Guide, Bronx High School, New York, NY, 2014

**Fulbright Awards Dinner Ambassador**, One to World Annual Fundraising Dinner, New York, NY, 2014

# V. PROFESSIONAL PRACTICE

## **EMPLOYMENT**

**Junior Architect**, Kliment Halsband Architects, New York, NY, 01/2015-04/2016 **Architecture Intern**, Gruzen Samton IBI Group, New York, NY, 07/2014-09/2014

#### SCHOLARLY/PROFESSIONAL MEMBERSHIPS

Nature Based Solutions for Urban Resilience in the Anthropocene (NATURA)

Urban Resilience to Extremes Sustainability Research Network (UREx SRN)

International Association for Urban Climate (IAUC)

Arizona State University Mentor Network

International Society of Biometeorology

American Meteorological Society

European Geosciences Union

**Fulbright Association** 

#### PROFESSIONAL DEVELOPMENT

**Workshop Participant**, 3rd international Workshop for Students and New Professionals, International Society of Biometeorology, Enschede, The Netherlands, 2019

**Competition Participant**, "Make for the Planet." Earth Optimism Summit 2017, Presented by Smithsonian Conservation Commons, Washington D.C., 2017

**Seminar Participant**, Fulbright "From Lab to Market." U.S. Department of State's Bureau of Educational and Cultural Affairs, Seattle, WA, 2014

**Conference Participant**, "Human Security in the Information Age." U.S. Naval Academy Foreign Affairs Conference, Annapolis, MD, 2014

**Student Scholar**, ERASMUS Workshop. European Union Intensive Programme, "Demographic Change and European Cities: A Focus on Immigration," Vienna University of Technology, Vienna, Austria, 2011

# VI. RELATED PROFESSIONAL SKILLS

**Research skills:** R Studio, SPSS, MAXQDA, ArcGIS, ENVI-met, RayMan, EnergyPlus, Adobe Creative Suite, Autodesk Revit, Rhinoceros 3D, Grasshopper 3D, Autodesk AutoCAD, Microsoft Office

Teaching skills: Blackboard, Canvas, eLearn

**Languages:** bilingual in Ukrainian and Russian, excellent English, proficient Spanish, basic Greek, and German