CURRICULUM VITAE OF SHANNON SANDERS MCDONALD

I. PROFESSIONAL AFFILIATION AND CONTACT INFORMATION

A. Present University Department or Unit:

Architectural Studies Program Master of Architecture School of Architecture

B. Office Address:

College of Applied Sciences and Arts Southern Illinois University 1365 Douglas Drive Carbondale IL 62901-6604 E-mail: smcdonald@siu.edu http://architecture.siu.edu/faculty-staff/arc-id-faculty/mcdonald.php https://smcdonaldsite.wordpress.com/

II. EDUCATION

LEED (Leadership in Energy and Environmental Design) Accredited Professional; 2009 to present Licensed Architect, Maryland; 2009 to present Licensed Architect, Pennsylvania; 2008 to present Licensed Architect, Georgia; 1999 to present NCARB (National Council of Architectural Registration Boards) Registration; 1997 Licensed Architect, Illinois; 1995 to present Masters of Architecture; Yale University; 1989-1992 Master of Fine Arts; Maryland Institute of Art; 1978-1980 Bachelor of Science Art Teacher Education, Magna cum Laude; Towson University; 1972-1976 Bachelor of Science Psychology, Magna cum Laude; Towson University; 1972-1976

Continuing Education:

IESVE Whole-Building Simulation: Sun, Wind, Light, Comfort & Energy, PLEA, Los Angeles, July 2016

Professional yearly course work to maintain AIA, LEED, and State Architecture Licenses (24 credits) AAS Eclipse 2017 Workshop, Carbondale, IL, June 2016

- Online class conceptual Energy Modeling taught by the Energy Center of Wisconsin, Energy Center University, 2013
- SBSE (Society of Building Science Educators), Summer Retreat Workshops, 2012, 2014, 2015
- SIUC Center for Service-learning and Volunteerism, Advanced Service Learning, May 2012
- SIUC continuing education, Responding Effectively to Students and Colleagues Who Are in Crisis Training, June 2012
- Portland Cement Association Professors Week-long Workshop, Precast Concrete Association, Great Lakes Region, August 2011
- Loyola University, Chicago, IL Multiple management classes for application for position of Art Department Chairman, Baltimore, MD, 1984-1985

III. PROFESSIONAL EXPERIENCE

Associate Professor, School of Architecture, College of Applied Sciences and Arts, Southern Illinois
University, Carbondale, IL, 2017-present
Assistant Professor, School of Architecture, College of Applied Sciences and Arts, Southern Illinois
University, Carbondale, IL, 2011-2017
Principal/Designer Architecture Firm: Shannon Sanders McDonald, AIA, 1996-present
LEED Consultant -Johns Hopkins Hospital Parking Garage, Baltimore, MD, 2010-2011;
Consultant, Town of Nantucket, Nantucket, MA, 2008-2010; Housing projects, Observatory, City
of Chicago School projects, Curtainwall, roof, window and renovations projects, Religious - two
story classroom addition, steeple design, elevator and washroom renovations
Awarded Focus Studio Professor, College of Architecture, Southern Polytechnic State University,
Marietta, GA, 2009 (Fall)
Adjunct Professor, School of Architecture and Planning, Morgan State University, Baltimore, MD,
2008 (Fall)
Adjunct Professor, Department of Architecture and Landscape Architecture, College of Engineering,
North Dakota State University, Fargo, ND, 2003 (Fall)
Visiting Master Thesis Revolving Studio Professor, School of Architecture, Montana State
University, Bozeman, MT, 2002 (Fall)
Visiting Assistant Professor, College of Architecture, University of Nebraska, Lincoln, NE, 2001–
2002
Adjunct Professor, College of Architecture, Southern Polytechnic State University, Marietta, GA,
2000 (Spring)
Staff Architect for TVSA/Heary, Atlanta, GA, 1999
Staff Architect for Goode Van Slyke, Atlanta, GA, 1998
Team Project Architect, Legat Architects, Waukegan, IL, 1995–1996
Team Design Architect, Ross Barney & Jankowski, Chicago, IL, 1994–1995
Design Architect, Muller and Muller, Chicago, IL, 1994–1995
Staff Designer, Booth/Hansen, Chicago, IL, 1993–1994
Staff Designer, A.M. Kinney, Evanston, IL, 1992–1993
Teaching Assistant Undergraduate studio, History of Modern Architecture, and Ornament Theory,
Yale University, New Haven, CT, 1990–1992
Research & Documentation, The Trustees of Reservations, Cummington, MA. 1991(Summer, Winter)
Construction, Habitat for Humanity, New Haven, CT, 1990 (Summer)
Designer, RTKL, Washington, DC, 1989 (Summer, Winter)
Designer, Ayers/Saint/Gross, Baltimore, MD, 1988 (Winter Break)
Teaching Assistant Technologies, College of Architecture, Syracuse University, Syracuse, NY, 1988 (Fall)
Assistant Designer, Schopfer Architects, Syracuse, NY, 1988 (Summer)
Assistant, Menefee and Associates, Baltimore, MD, 1987 (Summer)
Art Department Chairman, Baltimore County Public Schools, Towson, MD, 1984–1987
Art Teacher, Baltimore County Public Schools, Towson, MD, 1976–1987
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IV. RESEARCH AND CREATIVE ACTIVITY

A. Interests and Specialties:

Movement Technologies and their Relationship to Architecture, Urban Design, & Sustainability Emerging Spatial and Environmental Configurations for the 21st Century

B. Current Projects:

Participation in Mineta Transportation Grant for San Mateo County CA (2018)

McDonald, S.S., Elliot, D. & Bent, Z. (2018). "Driverless Vehicles, Transit, Sustainability, Architecture and Planning". AIA National Conference Presentation, New York City

McDonald, S.S. (2018). "Focusing on the As-built Environment to Properly Design for Resiliency, Integrating Transit Ride Sharing Services and Systems". ASCE International Conference Presentation, Pittsburgh, PA

Solar Energy Innovation Network Application, National Renewable Energy Laboratory: Spartan Superway – A Solar-Powered Automated Rapid Transit Network-pending

Innovation 2030 Competition Comprehensive Masters Studio Fall 2017 Entry

Faculty Advisor for RSO for USGBC: Green Building Council of Carbondale in process

Secrist, E. J., Maloney, M. A. & Bell, D. H.B. (2017). Southern Illinois University: Building a History. Peer reviewed undergraduate student book proposal. (in review - potential publication SIU Press) McDonald, S. S., advisor

C. Grants Applied For But Not Funded:

(External – all team applications)

Furman, B, McDonald, S.S. & Huesh, G. (2017). Mineta Transportation Institute Grant Proposal: Solar Powered Automated Transit in San José – A Comprehensive Design Study.
U.S. Department of Transportation Notice of Funding Opportunity – Number DTFH611RA00002
Beyond Traffic: The Smart City Challenge: City of St. Louis: The Smart City Challenge
Application Connecting People and Opportunity, 2016
NCHRP 20-102 RFP: Impacts of Connected and Automated Vehicles on State and Local
Transportation Agencies, National Cooperative Highway Research Project, 2016
TCRP Synthesis Statement: The Impact of Automated Transit Networks (ATN) on our
Communities and the Built Environment, Transit Cooperative Research Program
(TCRP), Transportation Research Board (TRB), 2016
Request For Information: FHWA's Request for Information DTFH6115RI00008, 2015
Regional Scenario Planning to Prepare for a Future with Automated Vehicles, TCRP Problem
Statement, 2015
ACRP 07-13 Enhancing Airport Wayfinding for the Elderly and Persons with Disabilities,
Airport Cooperative Research Program 07-13, 2015
Impact of Automation Technologies on Mobility, Institute for Mobility Research (ifmo), 2015
NSF 14-534 - AGS - Sustainability Research Networks
Award for Restoration of Buckminster Fuller Carbondale home, Richard H. Driehaus National
Preservation Awards, 2014
AGF RFFI, Colorado DOT, 2014
CyberSEES:Type 2: Enabling Road-Vehicle Sustainability with Cyber Transport Network, NSF
(National Science Foundation) Letter of Intent filed, 2013
National Council Architectural Registration Board Award for the Integration of Practice and
Education, 2013
Co-Pi NSF (National Science Foundation) Letter of Intent filed, Grant Project Title:
CyberSEES: Type 2: Enabling Road-Vehicle Sustainability with Cyber Transport
Network, Team: Co-PIs S.E. Young, Univ of MD, Center for Adv Trans Tech, Systems
Eng; S McDonald, Southern ILL Univ, ARCH; Consultants: A. Kornhauser, Princeton, Ops

& Financial Eng., Vehicle Automation; I. Andreasson & W. Buirghout, KTH Centre of Traffic Research, Trans Modeling, 2012

D. Grants Received:

(External)

San Jose State University Research Foundation. (2018). Mobility for All: Housing and

Transportation Best Practices Toolkit for San Mateo County.

McDonald, S. S. & Juster, R. (2016). ATRA Envisioning Automated Transit within the Built Environment: 2020, 2035, 2050 research workshop, 1,800.00 – ATRA, Leitner-Poma, National Transportation Center at the University of Maryland, and the National Center for Intermodal Transportation.

McDonald, S. S. & Rodier, C. (2015). TRB/AUVSI Automated Vehicles Symposium Workshop: Envisioning Automated Vehicles within the Built Environment 2020, 2035, 2050, research workshop, 5,000.00 –UC Davis National Center for Sustainable Transportation, NREL: National Renewable Energy Laboratory, ITS Michigan, Mineta Transportation Institute, and National Center for Intermodal Transportation.

 McDonald, S. S., Rodier, C. & Rubinyi, K. (2014). TRB/AUVSI Automated Vehicles Symposium Workshop: Envisioning Automated Vehicles within the Built Environment: 2020, 2035, 2050, research workshop. 8,500.00 –UC Davis National Center for Sustainable Transportation, Southern California Associations of Governments, ARUP, Kimley & Horn, Fehr & Peers, and National Center for Intermodal Transportation.

Davey, J, McDonald, S. S. & RBF Dome Board. (2013). *RBF Dome NFP, Landmarks Illinois Preservation Heritage Fund Grant,* \$1,500.00.

 Schwartz, C, Morthland, L. & McDonald, S. S. (2012 -2014). Cairo Youth Build: Southern Illinois University sub-grant. Employment and Training Administration of the United States Department of Labor via the Delta Center. Sub-Grant Co-PIs:, Timeframe: September 2012 – August 2015 (SIU participation concluded in August 2014), SIU Total Sub-Grant Amount: \$100,942 Total Grant Amount (Delta Center): \$727,557.

McDonald, S. S. (2011). Portland Cement Association Professors Week-long Workshop, Precast Concrete Association, Great Lakes Region, all expenses.

McDonald, S. S., Urness, C. & Hough, J. (2004). Construction of Heated and Cooled Bus Shelters at NDSU (North Dakota State University), National Transit Agency.

McDonald, S. S. (2002). AIA Georgia Legacy, Reynoldstown Project, Georgia Power Company

(Internal)

- Orr, S. & McDonald, S. S. (2016). SIU University master plan. SIU Green Fund Sustainability Grant. Fall 2016 - Spring 2017, \$2,800.00.
- McDonald, S. S., Orr, S. & Kauffman, K. (2015/6). University Bicycle Friendly Application, SIU Green Fund Sustainability Grant. Fall 2015 Spring 2016, \$4,600.00.

McDonald, S. S., Tate, R. & Hexmoor, H. (2014). Sustainable Transportation and Southern Illinois University, SIU CASA Summer Research Funding, \$10,000.00.

E. Honors and Awards:

- Feature in SIU Alumni Magazine: Shift Into Future Gear: A Conversation with Shannon McDonald Associate Professor, School of Architecture (2017).
- Bio in Saluki Stories Graduate School Promotional Materials. (2017). Retrieved from: http://gradschool.siu.edu/gss/:
- Graduate Faculty Mentor Award of Excellence from the College of Applied Sciences and Arts, 2017.

Honored opening remarks by Joop Veenis, www.veenis.net of the Netherlands, workshop directly based on the workshops from the TRB/AUVSI summer symposiums, 2016 Retrieved http://www.kimnet.nl/sites/kimnet.nl/files/chauffeur-aan-het-<u>stuur.pdf</u> - https://storify.com/joopveenis/automatisch-rijden-en-het-effect-op-de-toekomstige https://siu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=7e10fe76-9013-4f9c-

- Invited Presentation: EAT: Envision Automated Transit within the Built Environment Workshop Report. TRB Annual Meeting, AHB30 committee, 2016
- Fuller Dome Home Board, Pres. Professor John Davey: 2015 Richard H. Driehaus Foundation Preservation Award for Restoration. Landmark, IL, Chicago, IL, 2015

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- Invited Presentation: Urban Mobility Parking Facility Design- Architectural Perspective, TRB Annual Meeting, Parking sub-committee workshop, 2014
- The Car in 2035, American Planning Association Inland Empire Section Media Award. see <u>http://www.ies-apa.org/index.asp</u>
- Interviewed, book mentioned in Wall Street Journal, January 18, 2012, Sleek, Chic, Hangout ...A Garage, 2012
- Invited Participant, AIA IL Leadership Workshop, 2012
- Invited Panel Speaker, SIUC Technology and Innovation Expo, 2012 https://www.youtube.com/watch?v=RVNlzOznTCs
- Invited Presenter: The Parking Dilemma, Innovative Solutions for High-Density Parking and Automated Vehicle Storage, UCLA Zinman Center, 2011
- Andres Duany, F.A.I.A., C.N.U. Congratulatory Personal E-mail concerning published book 2011
- Invited Speaker: The Parking Garage: Changing Movement Technologies and Their Positive Impact on Design, Building in the 21st Century Lecture Series National Building Museum, 2010
- Invited Guest Diane Rehm Show, to discuss the book: The Parking Garage: Design and Evolution of a Modern Urban Form: July 7, 2010

Exhibit: The American Parking Garage: Design and Evolution of a Modern Urban Form, National Building Museum, 2009-2010

- Invited Lunch Time Talk: The Parking Garage: Design and Evolution of a Modern Urban Form, Library of Congress, 2008
- Invited Panel Participant, on The Mythical Parking Shortage: why Provide Excess Parking?, Congress for New Urbanism CNUXVI, 2008
- Invited Panel Participant, on Parking, Urban Land Institute, Atlanta, 2008
- Invited Speaker, Detroit 3rd Automotive Authors Book Fair, 2008
- Awarded Paper: Automated Parking, PRT and Sustainability, American Society of Civil Engineers: Automated People Movers Conference, June, 2007
- Awarded Paper: Integrating a Three-Dimensional Elevator System into Transportation Typologies, American Society of Civil Engineers: Automated People Movers Conference, May, 2005
- Invited Web Site Design that I maintain: Building Typology of the Parking Garage, Whole Building Design Guide National Institute of Building Sciences, 2002
- Invited Keynote Speaker, Man, Machine, and Movement The Evolving Typology of the American Parking Garage", California Public Parking Association, Monterey, CA, 2001

Architectural Awards, Major Contributor, as "design arm" with Carol Ross Barney on the Little Village Academy project - winner of numerous awards and in many publications, along with being the chosen school for the AIA Television commercial, 1996

Student Academic Award, Business and Professional Women's Association Scholarship, 1991

F. Presentations at Professional/Academic Meetings:

- McDonald, S. S. (2017, November). The Big Picture, Planning & People: 21st Synergies Between Architecture and Transportation. PODCAR City and Advanced Transit, Las Vegas, NV
- McDonald, S. S. (2017, November). 21st Synergies between Architecture and Transportation SIU Transportation Links for Bike and Transit – Green spaces of Carbondale- ASA Symposium, Carbondale, II.
- McDonald, S. S. (2017, October). Applying Solar Strategies for the Integration of Architecture and Transportation in Community Building. (Presentation). ASES Solar 2017, Denver, Co
- McDonald, S. S. (2017, May). Invited speaker: Princeton University Smart Driving Car Summit, Princeton NJ.
- Elliott, D, McDonald, S. S. & Bent, Z. (2017, May). Driverless Cars: Changing how you plan. (Invited Presentation). American Planning Association Annual Meeting, New York, NY.
- McDonald, S. S. (2017, April). Resilient Carbondale. (Presentation).FLASHTALK:1,

Carbondale, IL

- McDonald, S. S. & Ovca, L. (2017, April). Community planning for resilience: Sustainable resilient temporary home. (Paper Presentation). Architectural Engineering Institute Conference 2017, Oklahoma City, Oklahoma.
- McDonald, S. S. (2016, October). Designing Sustainable Communities for Automated Transit Networks. (Presentation) ASA Fall Creative Research Symposium, SIU, Carbondale, IL.
- McDonald, S.S. (2016, September). Rouse, New Town Columbia MD and PodCar Design. (presentation) PodCar City & Advanced Transit conference, Antwerp, Belgium
- McDonald, S. S. & Greene, R. (2016, July). Airflow design for middle class housing in Sierra Leone. PLEA2016, Los Angeles, CA.
- McDonald, S. S. (2016, January). Friday ancillary workshop envisioning automated vehicles within the built environment: 2020, 2035, 2050 Breakout Sessions Results Summary, TRB Workshop Session 133. TRB Annual Meeting, Washington, DC.
- McDonald, S. S. (2015, November). *Envisioning automated vehicles within the built environment,* 2020, 2035, 2050. Applied Sciences and Arts Multi-Disciplinary ResearchSymposium, Carbondale, IL.
- McDonald, S. S., Solomon, C. & McNary, J. (2015, October). *Think tank: 0970 Redefining campus mobility*. AASHE Conference and Expo, Minneapolis, MN.
- McDonald, S. S. (2015, July). *Beyond single occupancy vehicles: Automating transit and shared mobility*. TRB/AUVSI Automated Vehicle Symposium, Detroit, MI.
- McDonald, S.S. (2015, May). Integrative mobility, new ideas for Carbondale, IL and SIU Campus: Creating a resilient community with a sustainable transportation research center. ISAT Research Forum. Carbondale, IL.
- McDonald, S. S. (2015, January). *TRB184 #P15-6747: Fast forward future: Connected vehicle innovations and their future impact.* Workshop for ABH30: Transportation Research Board Annual meeting, Washington, DC. Retrieved from http://pressamp.trb.org/aminteractiveprogram/EventDetails.aspx?ID=31810
- Kornhauser, A., LeVine, S, Young, S & McDonald, S.S. (2015, January). Automated road vehicles: Shared mobility and automated transport. Transportation Research Board Annual meeting, Washington, DC.
- McDonald, S. S., Tate R., & Hexmoor, H. (2014, November). *Sustainable transportation research center*. Applied Sciences and Arts Symposium, Carbondale, IL.
- McDonald, S. S. (2014, July). *Integrated mobility- automated level 4 and their impact on parking*. TRB Road Vehicle Automation Symposium, Stanford, CA. McDonald, S.
- S. (2014, June). *Intuitive understandings to interdisciplinary curriculum*. Presentation to Society of Building Science Engineers Adaptation Retreat, Tucson, AZ.
- McDonald, S. S., Schwartz, C., & Morthland, L. (2014, April). Design build: Collaborative labor Creating community. In Stuart, J & Wilson, M (Eds.). *Proceedings of Globalizing Architecture /Flows and Disruptions: 102nd ACSA Annual Meeting*, Florida International University, Miami, FL. ISBN: 978-0-935502-86-2 Retrieved from http://apps.acsaarch.org/resources/proceedings/indexsearch.aspx?txtKeyword1=McDonald&ddField1=0
- McDonald, S. S., Kornhauser, A., LeVine, S. & Young, S. (2014, January). *Automated road vehicles shared mobility and automated transit.* TRB Annual Meeting, Washington, DC.
- Schwartz, C., McDonald, S. S. & Morthland, L. (2013, October). Building community: A preliminary evaluation of the intersection of diverse educational programs. Fourth International Conference on the Constructed Environment. (virtual presentation). Universidade Nova de Lisboa, Lisbon, Portugal. Retrieved from http://v13.cgpublisher.com/proposals/22/index_html
- McDonald, S. S. (2013, October). *New movement technologies and the parking garage*. National Parking Association Annual Meeting, Chicago IL.
- McDonald, S. S. (2013, July). *Integrated mobility*. TRB Road Vehicle Automation Workshop at the TRB/AUVSI Automated Vehicle Symposium, Stanford, CA.
- McDonald, S. S. (2013, March). *Key transportation linkages in the heartland: past and future*. Presentation to TRF (Transportation Research Forum) Annual Meeting, Annapolis, MD.
- McDonald, S. S. & Lucas Shubert, L. (2013, March). *Transportation conditions and solutions in Carbondale, IL*. TRF Annual Forum, Annapolis, MD.

McDonald, S. S. (2012, October). *PCI & parking: past, present and future*. PCI (Precast/Prestressed Concrete Institute) Convention and National Bridge Conference Proceedings, Nashville, TN.

McDonald, S. S. (2012, September). How new movement technologies can assist with seamless access for all, ID220. *Proceedings of the TRANSED (13th International Conference on Mobilityand Transport for Elderly and Disabled Persons), New Delhi, India Conference.* Retrieved from

Abstract:

http://www.transed2012.in/Common/Uploads/Theme_B_Session_4/220_abstr_ TRANSED_proposal.pdf

Presentation:

http://www.transed2012.in/Common/Uploads/Theme_B_Session_4/220-presn_Shanno_Sanders.ppt

Paper:http://www.transed2012.in/Common/Uploads/Theme_B_Session_4/220-paper_transedAbstract00031.pdf

McDonald, S. S. (2012, March). *Cars, parking and sustainability*. Transportation Research Forum (Transportation Research Forum), Tampa, FL.

- McDonald, S. S. (2012, January). Impacts to the built environment. *Proceedings of the TRB* (*Transportation Research Board*) *Annual Meeting*, *P12-6231*. Retrieved from http://amonline.trb.org/trb-59976-2012-1.2356077/t12017-1.2368705/181-1.2362558/p12-6231-1.2368983/p12-6231-1.2368984?qr=1
- McDonald, S. S. (2012, January). TRB, 12-2792, PRT, sustainability and walkable communities. *Proceedings of the TRB Annual meeting, Washington, DC*. Retrieved from *http://amonline.trb.org/trb-59976-2012-1.2356077/t12002-1.2376311/446-1.2363110/12-2792-1.2377398/12-2792-1.2377399?qr=1*

McDonald, S. S. (2011, November). Sustainable designs for emerging energy and movement technologies. AIAIL Collaboration/Innovation Conference: Lisle, IL.

McDonald, S. S. (2011, March). Creating fully sustainable walkable communities with personal rapid transit. *Proceedings Transportation &Development Congress*, Chicago, IL. pp. 1056-1065. doi: 10.1061/41167(398)101 Retrieved from http://ascelibrary.org/doi/abs/10.1061/41167%28398%29101

 McDonald, S. S. (2011, January). Sunday workshop: Transportation Research Board sponsored by APO20: *THE BIG PICTURE: Total Transportation Connectivity:* Integrating Transportation Technologies to Create Seamless Mobility Solutions for Livable Communities Session Presentation, at TRB APO40: *International Development of PRT Systems.* TRB Annual meeting, Washington, DC.

McDonald, S. S. (2010, Spring). New design synergies for parking, transportation and the *environment*. AIA Washington, DC. Annual Conference.

McDonald, S. S. (2010, March). Three new forms of movement that encourage walkable urban designs. *Proceedings of the 51st Annual Transportation Research Forum, Arlington, VA.* Retrieved from http://toc.proceedings.com/13766webtoc.pdf

McDonald, S. S. (2009, Fall). *Parking and PRT*. Carbon Free Mobility, One-Day Conference on Personal Rapid Transit Advanced Transit Association, Berkeley, CA.

McDonald, S. S. (2009, May/June). *Sustainability, PRT, and Parking*. 12th International Conference of Automated People Movers, Atlanta, Georgia, United States: pp. 297-308. doi: 10.1061/41038(343)25 Retrieved from http://dx.doi.org/10.1061/41038(343)25 and http://ascelibrary.org/doi/abs/10.1061/41038%28343%2925

McDonald, S. S. (2009, Spring). *New design synergies for parking, transportation and the environment.* South Atlantic Region Conference, AIA, Charleston, SC.

McDonald, S. S. & Young, S.E. (2009, January). Paper# 09-2879 Sustainable approaches to parking and PRT – interfaces and linkages. *Proceedings of the Transportation Research Board Annual meeting*, Washington DC. Retrieved from http://trid.trb.org/view.aspx?id=881971

McDonald, S. S. (2007, January). Architectural and planning considerations using PRT. Automated People Movers 07, Vienna, Austria.

Young, S., McDonald, S. S & Miller, R. (2007, January). Paper# 08-3123 Keys to Innovative transport development. *Proceedings of the Transportation Research Board Annual meeting*, Washington DC. Retrieved from http://trid.trb.org/view.aspx?id=848936

McDonald, S. S. (2006, June). The automobile at rest and its interactions with the 20th century American city: adaptive re-use -parking – adaptive re-use – the early parking garages interactive role in the construction of the modern city. Vernacular Architecture Forum, New York City, NY.

- McDonald, S. S. (2006, April). Engaging all disciplines within the education process. Proceedings of Building Integration Solutions: American Society of Civil Engineers Conference, Omaha, NE. pp.1-10. doi: 10.1061/40798(190)50 Retrieved from http://ascelibrary.org/doi/abs/10.1061/40798(190)50
- McDonald, S. S. (2005, June). The Parking Garage as the Undocumented Search for Modernism. In Covo, D & Mérigo Basurto, G. (Eds.). Proceedings American Collegiate Schools of Architecture International Conference, Encounters Encuentros Recontres, Mexico City, Mexico.pp.408-417. ISBN:0-935502-57-2 Retrieved from http://apps.acsaarch.org/resources/proceedings/indexsearch.aspx?txtKeyword1=116&ddField1=4
- McDonald, S. S. (2005, May). Integrating a three-dimensional elevator system into transportation typologies. *Proceedings Automated People Movers Conference 2015*, *American Society of Civil Engineers*, Orlando, FL. pp. 1-11. doi: 10.1061/40766(174)53 Retrieved from http://ascelibrary.org/doi/abs/10.1061/40766(174)53
- McDonald, S. S. (2004, June). *The parking garage as a building type and its future effects on our cities*. Construction Specifiers Institute Annual Convention, Chicago, IL.
- McDonald, S. S. (2003, July). The parking garage as the arrival and departure experience in the American city. In Poole, S & Sarpeneva, P. (Eds.). Proceedings ACSA International Conference, Helsinki, Finland, Contribution and Confusions: Architecture and the Influence of Other Fields of Inquiry, Session - The City as a Work of Art, (pp 505-515).
- McDonald, S. S. (2002). *Man, machine, and movement the evolving typology of the American parking garage*. International Parking Institute Convention, Toronto, Canada.
- McDonald, S. S. (2002, January). *The history of the American parking garage*. National Transportation Research Board Annual Meeting history committee, Washington D.C.
- McDonald, S. S. (1999). *The history of the American parking garage and its impact on the American city*. National AIA Convention, Dallas, TX.
- McDonald, S. S. (1998, June). *The history of the parking garage*. J.B. Jackson Conference, University of New Mexico, Albuquerque, NM.

G. Other:

Articles in Professional Trade Journals/Periodicals:

McDonald, S. S. (2010). Automated parking saves space in tight places. *InTransition*, 17(1), 19-20, 34.

McDonald, S. S. (2010). Bicycles, pedestrians, automobiles, transit and parking facilities. *Association of Pedestrian and Bicycle Professionals*. Retrieved http://c.ymcdn.com/sites/www.apbp.org/resource/collection/5DE92501-A2C5-485C-A537-428A1C913C93/Bike_Parking_in_Garages_McDonald.pdf

- McDonald, S. S. (2008). How mechanization can help cities rethink parking. *Planetizen*, Retrieved from http://www.planetizen.com/node/30138.
- McDonald, S. S. (2006). Man, machine and movement: Creating a new transportation paradigm. Engineering News Record, McGraw-Hill Construction. *Construction, Building & Engineering News: ENR | McGraw-Hill Construction*. Retrieved from http://enr.construction.com/opinions/viewPoint/archives/080603.asp.
- McDonald, S. S. (2006). The complexity with transportation projects. *Construction Specifier Magazine*, 55(10), 26-29.

- McDonald, S. S. (2006). The last century of American parking, planning and its future synergies. *Transportation Planning*, *31*(2), 7-8, 11-14.
- McDonald, S. S. (2005). Form follows parking: A survey of parking facility design in Georgia. do-co.mo..mo Georgia Chapter Newsletter.
- McDonald, S. S. (2005). Bus shelters to parking structures: The importance of transportation typologies in architectural education. *The Parking Professional*, 12-16.
- McDonald, S. S. (2005). Designing multi-modal stations within historic downtowns. *Parking*, 44(3), 42-45.
- McDonald, S. S. (2005). The evolution of the automated parking facility two parts. Parking,
- McDonald, S. S. (2005). Design into reality: Architecture students and product knowledge. *Construction Specifier Magazine*, 58(6), 10-11.
- McDonald, S. S. (2005). Creating synergies for future transportation solutions. *National Transportation Board Conduct of Research Committee Newsletter*
- McDonald, S. S. (2004). Bicycles, automobiles, and automation in Japan. *Parking*, 43(9), 17-21.
- McDonald, S. S. (2004). Bicycle garages stand alone automated and within existing garages. *Parking*,

McDonald, S. S. (2003). Man and machine in parking garage design. The Parking Professional,

McDonald, S. S. (1997). The first 50 years of parking garage design: A twentieth century innovation: The parking garage. *Parking*, *36* (8), 34-41

V. PUBLICATIONS AND CREATIVE WORKS

A. Books:

McDonald, S. S. (2007). *The Parking Garage: Design and Evolution of a Modern Urban Form*. Washington, DC: Urban Land Institute.

B. Articles in Professional Journals:

- McDonald, S. S. & Chakradhar, S. (2016). Energy efficient commercial complex in Kathmandu, Nepal: Integrating energy simulations into the design process, *Journal of Architectural Engineering*. Retrieved from: http://ascelibrary.org/doi/10.1061/%28ASCE%29AE.1943-5568.0000239
- McDonald, S. S. & Shubert, L. (2015). 1-102: Transportation conditions and solutions in Carbondale, Illinois. *Journal of Applied Sciences and Arts*, 1 (1). Retrieved from http://research.asa.siu.edu/journal/jasa.jpg ISSN: 2377-8687
- Schwartz, C., Morthland, L. & McDonald, S. S. (2014). Building a social framework: Utilizing design/build to provide social learning experiences for architecture students. *Architectural Theory Review*, 19 (1), pp.76-91. doi:10.1080/13264826.2014.894606 Retrieved from http://www.tandfonline.com/doi/abs/10.1080/13264826.2014.894606

C. Creative Contributions:

- McDonald, S. S. (2013). Drawing: *Mind and Body*. Annual Combined Faculty Art Show, SIUC University Museum, Carbondale, IL. (not juried)
- McDonald, S. S. (2013). Drawing: *the Gaze*. Annual Combined Faculty Art Show, SIUC University Museum, Carbondale, IL. (not juried)
- McDonald, S. S. (2010-2011) LEED Consultant -Johns Hopkins Hospital Parking Garage, Baltimore, MD.

D. Chapters in Professional/Academic Books:

- Schwartz, C., Morthland, L. & McDonald, S. S. (2014). Building a social framework: Utilizing design/build to provide social learning experiences for architecture students. In Sumita Singha Women in Architecture (Routledge, 2018)
- McDonald, S. S. & Rodier, C. (2015). Envisioning automated transit within the built environment: 2020, 2035, 2050. In Gereon Meyer and Sven Beiker (Eds.), *Lecture Notes in Mobility: Road Vehicle Automation 2* (pp. 225-223). Springer Cham Heidelberg New York Dordrecht London © Springer International Publishing Switzerland. ISBN: 978-0-387-89469-0 (Print) 978-1-4419-0851-3 (Online)
- McDonald, S. S. & Astrup R. (2014). Automated storage and retrieval systems (avsrs) in sustainable parking. In Rachel Yoka (ed.), *Sustainable Parking Design & Management:* A Practitioner's Handbook (pp. 114-128). Alexandria, Virginia: The National Parking Association and The International Parking Institute.
- McDonald, S. S. (2013). The evolution of parking. In Kati Rubinyi (Ed.). *The Car in 2035* (pp. 184-190). New York: The Civic Projects Foundation. American Planning Association Inland Empire Section Media Award. Retrieved: <u>http://www.ies-apa.org/index.asp</u>.
- McDonald, S. S. (2012). Personal rapid transit and its development. In R.A. Meyers, (Ed.). *Encyclopedia of Sustainability Science and Technology* (pp. 831-850). New York: Springer Reference. doi 10.1007/978-1-4419-0851-3, # Springer Science+Business Media, LLC

F. Book Reviews:

- McDonald, S. S. (2017, Summer). Airport urbanism. [Review of the bool *Airport Urbanism* by Max Hirsh]. Transportation Research Forum, Vol. 56, No. 1 (Spring 2017), p. 115-118. https://trforum.org/wp-content/uploads/2017/07/Book-Review-Airport-Urbanism.pdf
- McDonald, S. S. (1992, Spring). The natural and the man made. [Review of the book *Architecture: The Natural and the Man Made* by Vincent Scully]. Architectureview, 1 (1), 14-16.

G. Other:

Conference Proceedings, Papers and Posters:

- McDonald, S. S. & Ovca, L. (2017, April). Community planning for resilience: Sustainable resilient temporary home, Architectural Engineering Institute Conference 2017, Oklahoma City, Oklahoma.
- McDonald, S. S., & Greene, R. (2016, July). *Airflow design for middle class housing in Sierra Leone*. PLEA2016, Los Angeles, CA.
- McDonald, S. S. (2015, January). Poster: TRB, 15-4916, Automated road vehicles: Shared mobility and automated transport: Parking, automated vehicles, transit and urban design. TRB Annual Meeting, Washington, DC.
- McDonald, S. S., Schwartz, C., & Morthland, L. (2014, April). Design build: Collaborative labor creating community. In Stuart, J & Wilson, M (Eds.). *Proceedings of Globalizing Architecture / Flows and Disruptions: 102nd ACSA Annual Meeting*, Florida International University, Miami, FL. ISBN: 978-0-935502-86-2 Retrieved from http://apps.acsaarch.org/resources/proceedings/indexsearch.aspx?txtKeyword1=McDonald&ddField1=0
- McDonald, S. S. (2013, March). *Key Transportation Linkages in the Heartland: Past and Future*. March 54th Annual Transportation Research Annual Forum, Annapolis, MD. Abstract retrieved from: http://www.trforum.org/forum/downloads/2013_proceedings.pdf

- McDonald, S. S. (2012, October). *PCI & parking: past, present and future*. PCI (Precast/Prestressed Concrete Institute) Convention and National Bridge Conference Proceedings, Nashville, TN.
- McDonald, S. S. (2012, September). How new movement technologies can assist with seamless access for all, ID220. *Proceedings of the TRANSED (13th International Conference on Mobility and Transport for Elderly and Disabled Persons), New Delhi, India Conference*. Paper Retrieved from Conference Proceedings: http://www.transed2012.in/Common/Uploads/Theme_B_Session_4/220paper_transedAbstract00031.pdf
- McDonald, S. S. (2012, March). *Cars, Parking and Sustainability*. TRF (Transportation Research Forum) Annual Meeting. Tampa FL.
- McDonald, S. S. (2012, January). Impacts to the built environment. *Proceedings of the TRB (Transportation Research Board) Annual Meeting, P12-6231.* Retrieved from http://amonline.trb.org/trb-59976-2012-1.2356077/t12017-1.2368705/181-1.2362558/p12-6231-1.2368983/p12-6231-1.2368984?qr=1
- McDonald, S. S. (2012, January). TRB, 12-2792, PRT (Personal Rapid Transit), sustainability and walkable communities. *Proceedings of the TRB Annual Meeting, Washington, DC*. Retrieved from *http://amonline.trb.org/trb-59976-2012-1.2356077/t12002-.* 2376311/446-1.2363110/12-2792-1.2377398/12-2792-1.2377399?qr=1
- McDonald, S. S. (2011, November). Sustainable designs for emerging energy and movement technologies. AIAIL Collaboration/Innovation Conference: Lisle, IL.
- McDonald, S. S. (2011, March). Creating fully sustainable walkable communities with personal rapid transit. *Proceedings Transportation & Development Congress*, Chicago, IL. pp. 1056-1065. doi: 10.1061/41167(398)101 Retrieved from http://ascelibrary.org/doi/abs/10.1061/41167%28398%29101
- McDonald, S. S. (2010, March). Three new forms of movement that encourage walkable urban designs. *Proceedings of the 51st Annual Transportation Research Forum, Arlington, VA.* Retrieved from http://toc.proceedings.com/13766webtoc.pdf
- McDonald, S. S. (2009, May/June). *Sustainability, PRT, and Parking*. 12th International Conference of Automated People Movers, Atlanta, Georgia, United States: pp. 297-308. doi: 10.1061/41038(343)25 Retrieved from http://dx.doi.org/10.1061/41038(343)25 and http://ascelibrary.org/doi/abs/10.1061/41038%28343%2925
- McDonald, S. S. & Young, S.E. (2009, January). Paper# 09-2879 Sustainable approaches to parking and PRT – interfaces and linkages. *Proceedings of the Transportation Research Board Annual meeting*, Retrieved from http://trid.trb.org/view.aspx?id=881971
- Young, S., McDonald, S. S & Miller, R. (2007, January). Paper# 08-3123 Keys to Innovative transport development. *Proceedings of the Transportation Research Board Annual meeting*, Washington, DC. Retrieved from http://trid.trb.org/view.aspx?id=848936
- McDonald, S. S. (2006, April). Engaging all disciplines within the education process. *Proceedings of Building Integration Solutions: American Society of Civil Engineers Conference*, pp. 1-10. doi: 10.1061/40798(190)50 Retrieved from http://ascelibrary.org/doi/abs/10.1061/40798(190)50
- McDonald, S. S. (2005, June). The Parking Garage as the Undocumented Search for Modernism. In Covo, D & Mérigo Basurto, G. (Eds.). Proceedings American Collegiate Schools of Architecture International Conference, Encounters Encuentros Recontres, Mexico City, Mexico. ISBN:0-935502-57-2 Retrieved from http://apps.acsaarch.org/resources/proceedings/indexsearch.aspx?txtKeyword1=116&ddField1=4
- McDonald, S. S. (2005, May). Integrating a three-dimensional elevator system into transportation typologies. *Proceedings Automated People Movers Conference 2005, American Society of Civil Engineers*, Orlando, FL. pp. 1-11. doi: 10.1061/40766(174)53 Retrieved from

http://ascelibrary.org/doi/abs/10.1061/40766(174)53

McDonald, S. S. (2003, July). The parking garage as the arrival and departure experience in the American city. In Poole, S & Sarpeneva, P. (Eds.). Proceedings ACSA International Conference, Helsinki, Finland, Contribution and Confusions: Architecture and the Influence of Other Fields of Inquiry, Session - The City as a Work of Art, (pp 505-515).

Work Cited:

- McDonald, S.S. (2012). Personal Rapid transit (PRT) System and its Development in Transportation Technologies for Sustainability, Springer pp. 831-850, (2013)
 "Technology Aspects of PRT Systems". Cited by Suraj Bijjahalli, Subramasamy Ramasamy and Roberto Sabatini (School of Engineering – Aerospace and Aviation Discipline RMIT University, Melbourne, VIC 3000, Australia) in "A GNSS integrity augmentation system for sustainable autonomous airside operations", Proceedings of the International Symposium on sustainable Aviation 2016 (ISSA 2016) Istanbul, Turkey, May, 2016. (continually cited)
- McDonald, S. S. (2012). Technology aspects of PRT systems. Encyclopedia of Sustainability Science and Technology. ISBN: 978-0-387-89469-0 (Print) 978-1-4419- 0851-3 (Online): cited by authors (Olfa Chebbi et al. High Institute of Management, University of Tunis, 41 Rue de la Liberte, 2000 Le Bardo, Tunisia) (continually cited)
- Mazhar, R. (2012, Summer). Book Review: The Parking Garage: Design and Evolution of a Modern Urban Form.[Review of the book The Parking Garage: Design and Evolution of a Modern Urban Form by S.S. McDonald]. JTRF (The Journal of the Transportation Research Forum). 51(2), 127-129.
- Review of *The Parking Garage: Design and Evolution of a Modern Urban Form*. Engineering News Record. (2008).

Webinars/Videos/Web Sites:

- Furman, Burford, Swenson, Ron, McDonald, Shannon S., Hagstrom, Eric & Rosenfeld, Eric. Te3 Webinar series (US Department of Transportation) (Producer), (2016, November). Solar-Powered automated transportation networks. Retrieved from http://www.itsga.org/t3e-webinar-solar-powered-automated-transit-networks-thefutureof-sustainable-urban-transportation/
- McDonald, S. S., Lott, S., Gettman, D. & Muller, P. TRB Webinar Series (Transportation Research Board) (Producer), (2016, June). Automated transit future impacts on the built environment: 2020, 2035, and 2050. Retrieved from http://www.trb.org/ElectronicSessions/Blurbs/174500.aspx
- McDonald, S. S. Web Site: Parking Facilities | Whole Building Design Guide, National Institute of Building Sciences Director Richard Paradis (Producer). (2015, January). Retrieved from http://www.wbdg.org/design/parking.php
- McDonald, S. S. TRF Technologies Chapter Transportation Research Forum Webinar Series (Producer). (2015, June). *Automated vehicles and automated transit: Potential impacts on our built world*. Retrieved from http://www.trforum.org/chapters/
- McDonald, S.S. Automated Green Parking for the Green Parking Council (Producer). (2013, March). *Automated parking*. Retrieved from

http://www.greenparkingcouncil.org/portfolio-item/automated-parking-garages/

McDonald, S. S. Precast/Prestressed Concrete Institute (Producer). (2012). *Parking trends*. Retrieved from http://www.youtube.com/watch?v=S4L5P0gUukQ

McDonald, S. S. Rauch Foundation (Producer). (2011, October - December). Featured written work: multiple articles concerning parking for, web site; *Build a Better Burb, Rauch Foundation*. Retrieved from *http://rauchfoundation.org/knowledge-center/build-a-betterburb/*

Exhibits:

- McDonald, S. S. Exhibition Consultant (2009-2010). Curator: Sarah A. Leavitt. *House of Cars: Innovation and the Parking Garage*. National Building Museum, Washington, D.C.
- McDonald, S. S. (2004, Spring). Exhibit of Third Year Student work, *Bus stops for NDSU*, Heritage Hjemkomst Interpretive Center Morehead, Minnesota.

McDonald, S. S. (2002, Spring). Exhibit of Third Year Student work: A multi-modal station for Lincoln, NE. Wells Fargo Bank, Downtown Lincoln, NE.

Other:

Ranked consistently in the top 2-4% on www.Academia.edu

VI. TEACHING EXPERIENCE

A. Teaching Interests/Specialties:

New teaching technology strategies for interdisciplinary collaboration in design studios On-line Learning in general as well as multi-disciplinary online certificate program on parking and transportation

Energy Modeling and the design process

Courses & Section No.:

Comprehensive Masters: ARC_551 (fall 2012, 2013, 2014, 2015, 2016, 2017 spring online 2014) *received highest honors in accreditation*2nd Year Design Studio: ARC 252 (spring 2018)
Energy Modeling 788 ARC_502 (fall 2015)
Integrative Studio: ARC_452 (spring 2012, 2013, 2014, 2015, 2016, 2017) *received highest honors in accreditation*Preservation/Summer Build: ARC_434 (summer 2013, 2014)
Environmental Systems II Energy and Systems: ARC_481 ID_481 (fall 2012, 2013, 2014, 2015, 2016, 2017 (including labs) (350)(fall, spring online for 3rd year traveling students)
Environmental Systems III Lighting and Acoustics: Arc_482 ID_382 (spring 2017, 2018)
Architecture Systems + Environment: ARC541 Online (spring 2017)
Understanding Sustainable Human Settlement Patterns: Online Masters Seminar (summer 2017)

B. Teaching and Training Grants:

(External)

Undergraduate Brazilian Scientific Mobility Summer Research Recipients and Posters:

Jessica Birilo (2015). Bicycle Rack Research and Documentation of SIU campus – posted on SIU Website: http://parking.siu.edu/on-campus/201507-bike_rack_map.html

Birelo, J., Kauffman, K., Orr, S. & Wagner, A. (2013, April). A bicycle friendly University.
 SIU Undergraduate Research Forum Poster. 2nd Place Winner at Applied Sciences and Arts Symposium, Carbondale, IL poster competition

Diogenes Lopes Guirmaraes (Parking Lots, Solar Power and Electric Vehicle Research And Documentation for SIU and Carbondale, IL)

Guirmaraes, D.L. (2013, April). *Parking lots, solar power and electric vehicle research and documentation for SIU and Carbondale, IL*. SIU Undergraduate Research Forum Poster.

(Internal)

McDonald, S. S., Doctoral Assistant: Mohamad Ali Baba Development of a Masters Online Certificate Program, 7,588.50 – SIU Grant from Distance Education and Off- Campus Programs, May, 2012 (on hold to implement) ARC 502-953 Architecture Seminar (online distance education) Architecture/Parking/Community Visions: Emerging Transportation Technologies and Sustainability Introductory video about the course: http://www.youtube.com/watch?v=2jUGvjrCXVQ&feature=youtu.be

C. Teaching Honors and Awards:

Graduate Faculty Mentor Award of Excellence from the College of Applied Sciences and Arts, April 04, 2017.

- ARC551, (2014) online studio in Arlanda, Sweden; development of a new community called DriveLab; St. Louis AIA provided two scholarships due to the excellence of student work as critiqued by the St. Louis professional architects
- ARC452 Fourth year studio honored; Columbus model created by students kept for the Columbus archives and honored in paper and with review by the mayor, Spring 2013 http://architecture.siu.edu/_common/images/news-images/tyler-cain-the-republic-article http://architecture.siu.edu/news-and-events/siu-student-design-createssensation.php

D. Current Graduate Faculty Status:

Member Graduate Faculty

E. Number of Master's and Ph.D. Committees on which you have served:

Doctoral Thesis Committee member:

2 committees SIUC and SIUE Cooperative Ph.D. program, 2014 & 2015

Bahaaldin, K. (2015). Evaluation of the Impact of Connected Vehicle Technology on Evacuation Traffic Operations (Unpublished Doctoral dissertation). SIUE (Southern Illinois University Edwardsville), Edwardsville, IL

Williamson, M. (2014). A Study of the Safety Impacts of Different Types of Driveways and Their Proximity (Unpublished Doctoral dissertation). SIUE (Southern Illinois University Edwardsville), Edwardsville, IL

Master's Architecture Committees:

4 (Four) Committees – 2 (Two as chair), 2017

11 (Eleven) Committees – 5 (Five) as chair, 2016

9 (Nine) Committees – 4 (Four) as chair, 2015

7 (Seven) Committees – 2 (Two) as chair, 2014

6 (Six) committees - 2 (Two) as chair, 2013

7 (Seven) Committees- 3 (Three) as chair, 2012

F. Names of Students who have completed Master's Theses and Doctoral Dissertations under your Direction:

Masters Theses Completed:

Faezeh Ensafi, Intersection between Music and Architecture, The Seven Valleys of Love, 2017

Dalton Webb, An Urban Agriculture Community Center: Fair Ground Park, Saint Louis, MO, 2017

Austin Weitnauer, High Rise Housing for India, 2017

Marc Lazowski, Energy Plus Housing for The Growth Of Minneapolis, 2016

Xiaoquian Chen, Ecological Architecture: Urban Complex in Shenzhen, China, 2016

Eric Okerstrom, The Living Building Challenge, 2016

Hanan Rawashadeh, Al Salam Schools, 2016

Sabin Chakradhar, 2015 Henry Adams Award Winner, medal and certificate (the highest honor), An Energy Efficient Commercial Complex in Katmandu (also presented at SBSE with a scholarship to attend), 2015

Ryan Northcutt, Kansas City Project for the Arts, 2015

Ryan Kinports, Sustainable Master Plan for Repurposing Exhausted Industrial Mining Sites, 2015

Stephen Tutka, Filling a Need - Housing for Homeless Men in Saint Louis, MO, 2015 Ronald Greene, Eco-Affordable Housing Project York Village, Freetown, Sierra Leone, 2015 Tim Shotts, Evacuated Tube Transit Station: A New Transit Paradigm, 2014

Lucas Shubert, High Efficiency Transit Oriented Development in Carbondale, IL, 2013 Andrew Hustedde, Reviving Old North St. Louis through a Mixed-Use Development, 2013 Rafat Motan, Understanding Spatial Segregation: Toward More Integrated Reciprocity in the

Building Environment, 2012

Matthew Owens, New Passenger Terminal Williamson County Regional Airport, 2012 Zachary Collins, The Joshua: A Biomimicry Hotel Complex in Las Vegas, 2012

Masters Theses in Progress:

Matt Maloney, New Development in Herron, IL Kris Wells, Racial Issues In Development and Housing

G. Other:

Paid Graduate Research Assistants:

Matt Maloney, Automated Transit Networks Design Guideline, 2017-2018. Ken Howder, Window Replacement Algorithm Driven Shading Device (ADSD), 2015-2016 Sabin Chakradhar, Integrating Energy Simulations into the Design Process, 2014-2015

Chakradhar, S. (April, 2015). *Integrating Energy Simulations into the Design Process*. SIU Research Fair Poster.

- Kayla Fuller, Urban Livability: *Revitalizing the Square in the Heartland*, Quincy, Illinois, Presentation Transportation Research Forum, 2013-2014.
- Lucas Shubert, Transportation Conditions and Solutions in Carbondale, Illinois, 2012-2013 Shubert, L. (April, 2013). *Personal rapid transit*. SIU Research Fair Poster & Paper.
- Laura Thomas, Existing Southern Illinois Transportation Systems, 2011- 2012, Digital Map presented at Transportation Research Forum, March 2012

Undergraduate Research Rookie:

Ovca, L. (April, 2013). Energy Benefits of Restoration and Preservation of Historical and Existing Buildings. SIU Undergraduate Research Forum Poster.

Undergraduate Honors Thesis Work:

Ovca, L. (2016, Spring). *Disaster Relief Housing: A Passive Design Approach*. Presentation SIU.

Energy Mentor – SIU Engineering Grant:

Courtney Rudloff (spring 2017) Tanna Gillespie (spring 2017)

Undergraduate Research Assistants:

Shelby Orr, Sustainable SIU/ City of Carbondale Campus Design, Fall 2015 (responsible for SIU Bicycle Survey, Spring 2016)

Eric Seacrist, Matt Maloney, (Architecture department) & David Bell (History Department) (working on a book of SIU Campus Architecture for potential SIU Press) 2015,2016 Courtney Rudloff (Architecture): *Bike/Car Sharing*

Graduate Teaching Assistants:

Jacob Petty, 2017 (spring) (ARC541) Marat Tsablinov, 2015 (ARC481) Anthony Michael, 2014 (ARC481) Lani Walker, 2013 (ARC481) Andulsak Chanyakorn, 2012 (ARC481) Laura Thomas, 2011 (ARC481)

Competitions

Dana Khidhr (Balaky), Shannon Sanders McDonald, AIA, Gaznag Othman ,Ruba Bdair. Place and Displacement: A Marketplace in Refugee Settlements: Al-Zaatari – Jordan Oasis of the Heart, IDEA competition, February, 2017

VII. UNIVERSITY EXPERIENCE

A. Department Committees:

IPAL Program Approved, 2017, member of committee to develop

- Curriculum Committee, School of Architecture, 2012-current; working on the Integrated Path Curriculum Proposal
- Tau Sigma Delta, initiator and sponsor of new Chapter Delta Beta, Architecture Studies Program, 2012-present
- Faculty Advisor to American Institute of Architects Student Chapter, Architecture Studies Program, 2015 – 2016 - Ms. Kelsey Kauffman was selected as the 2016 AIAS Chapter President of the Year!

Masters Admissions Committee, Architecture Studies Program 2012, 2013, 2018

B. College and University Committees and Councils:

Member of the Sustainability Council, 2016 - present College Scholarship Committee, 2017 SIU Writing Group Member, 2015-2017 Honors Day Committee, 2011- 2014 Chair, 2013 – 2014 Traffic and Parking Committee, 2013, 2014 Associate Dean Search Committee, College of Applied Sciences and Arts, 2012

C. Other:

University Service:

Invited Participation in Mentorship Symposium Graduate Council and the Graduate and Professional Student Council. (2017, November). Southern Illinois University Volunteer for Eclipse Day at SIU. (August, 2017)

Volumeer for Eclipse Day at SIO. (August, 20

MOOC video for the SIU Energy MOOC

- Judge, Undergraduate Creative Activities and Research Forum. (2017, 2016, April) Art Art Design category. SIU, Carbondale, IL.
- Initiated and coordinated a Student-Exchange Agreement for the SIUC School of Architecture and the SIUC Department of Geography and Environmental Resources and the Department of Technology and Built Environment Gavle University, Sweden, UG, 2015 – 2 Swedish students currently attending SIUC, Spring, 2016
- Demonstrated Adobe Connect in the library for 4th Annual Teaching and Learning with Technology SIU Symposium, invited by John Dobbins – February 24, 2015

Department Service:

Participant CIDA Interior Design Accreditation Committee Member Online Pool Search Created Online Career Fair

VIII. PROFESSIONAL SERVICE

A. Membership in Professional Associations:

AIA (American Institute of Architects), ongoing
TRB (Transportation Research Board) – APO20 (Emerging and Innovative Public Transport and Technologies) and APO40 (Automated Transit Systems) committee member, sub- committee Automated Vehicle, ongoing
Automated and Mechanical Parking Association, ongoing
Affiliate Member PCC (Parking Consultants Council), 2012- 2017
ATRA (Advanced Transit Association), ongoing
SBSE (Society of Building Science Educators) ongoing
TRF (Transportation Research Forum), 2012-2017
Urban Land Institute, Baltimore Chapter, 2010
National Transportation Board Conduct of Research Committee, 2007/2005

B. Office Held and Honors Awarded in Professional Associations:

Board Member, ATRA, 2010 - present
Academic Chair – ATRA, 2014 - present, created Academic Council (http://www.advancedtransit.org/)
Technologies Chapter Organizer, Leader, TRF (Transportation Research Forum), 2013-2016
Research Coordinator TRB Committee AP040: Emerging and Innovative Public Transport and Technologies, 2011- 2016
Vice-President- ATRA, 2014
Committee member, AIA Baltimore, 2010

D. Evaluation of Manuscripts for Journals and Book Publishers and of Grant Proposals for *Papers:*

- McDonald, S. (August 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Leveraging shared autonomous electric vehicles for first/last mile mobility
- McDonald, S. (August 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Innovative Business Architectures (BAs) for Mobility as a Service (MaaS) – exploration, assessment, and categorization using operational MaaS cases.
- McDonald, S. (August 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Unravelling the Relationship between Bike Share and Rail Transit Use: A Chicago Case Study
- McDonald, S. (September 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Research on the category adjustment of on-street parking lot in center city based on combination evaluation model.
- McDonald, S. (September 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Sharing is Caring: Dynamic Autonomous Vehicle Fleet Operations Under Demand Surges.
- McDonald, S. (Sept 2017). Paper reviewer for Transportation Research Board (TRB) submittal, paper: Predicting Sharing Willingness of Private Residential Parking Spots Owners Using Classification and Regression Tree Approach.
- McDonald, S. (Oct 2017). Paper reviewer for SIU ASA Paper Presentations submittal, paper: A Smart Internet of Things (IoT) Prototype for Accurate People Counting Towards Energy Efficient Buildings.
- McDonald, S. (Oct 2017). Paper reviewer for SIU ASA Paper Presentations submittal, paper: Empirical analysis of the level of awareness and integration of sustainable Architecture in Nigeria.
- McDonald, S. (Oct 2017). Paper reviewer for SIU ASA Paper Presentations submittal, paper: Light and Images as Spatial Parameters.
- McDonald, S. (Oct 2017). Paper reviewer for SIU ASA Paper Presentations submittal, paper: Syntopy A Model of Space.
- McDonald, S. (Oct 2017). Paper reviewer for SIU ASA Paper Presentations submittal, paper: Light.
- McDonald, S. (September 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper #17-00019.
- McDonald, S. (September 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper A two-stage....
- McDonald, S. (September 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper Characteristics of Vehicle Owners....
- McDonald, S. (September 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper Index Choice Experiment...
- McDonald, S. (September 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper Road Congestion...
- McDonald, S. (Sept 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper #17-04151.
- McDonald, S. (Sept 2016). Paper reviewer for Transportation Research Board (TRB) submittal, paper #17-0058.
- McDonald, S. (October 2016). Paper reviewer for Transport Policy "Parking for Residential\ Delivery in New York City: Regulations and Behavior, JTRP_2016_195
- McDonald, S. S. (2016, November). Paper reviewer for PLEA2016 LA conference, "Spatial and Environmental Delight in Louis I Kahn's residential building".
- McDonald, S. S. (2016, November). Paper reviewer for PLEA2016 LA conference, "Outside in: Using the Natural Movements of Sunlight, Wind and Rain to Animate Sustainable Practices and Building Interiors".
- McDonald, S. S. (2016, November). Paper reviewer for PLEA2016 LA conference, "Climate Responsive User-Interface: Environmental Control Residential Facilities,"

- McDonald, S. S. (2015, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #16-1790.
- McDonald, S. S. (2015, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #16-5438.
- McDonald, S. S. (2015, September). Paper re-reviewer for Transportation Research Board (TRB) submittal, paper #15-4210.
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "A Design Tool for Green Regeneration Of Open-Spaces In Residential Neighborhoods".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Quality of Life (QOL) in Cities".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Workflow for Calibration of Mixed-Mode Building For Retrofitting of Educational Facility with Passive Strategy".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Role of Fenestration Design in Classroom Spaces of School Buildings".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Light in Chapel of St. Ignatius of Steven Holl and Monastery of Novy Dvur of John Pawson: The Legacy of Le Corbusier's Sacred Buildings".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Analysis of the influence of the dormitory planning and design to the living environment of the foreign students in China Case study on Zhejiang University".
- McDonald, S. S. (2015, November). Abstract reviewer for PLEA2016 LA conference, "Modelling and Comparison of Three Urban Block Typologies in Brussels-Capital Region (Belgium)".
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-0360.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-2270.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-2940.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-3403.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-3858.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-3858.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-4210.
- McDonald, S. S. (2014, September). Paper reviewer for Transportation Research Board (TRB) submittal, paper #15-4916.
- McDonald, S. S. (2014, February). Paper reviewer for Transportation Research Forum (TRF) submittal, Paper: "Developing an Electronic Toll Collection System...".
- McDonald, S. S. (2014, February). Paper reviewer for Transportation Research Forum (TRF) submittal, Paper: "High speed Rail Learning System ...".
- McDonald, S. S. (2014, February). Paper reviewer for Transportation Research Forum (TRF) submittal, Paper: "Assessing the Effectiveness of a Portable Dynamic Lane ...".
- McDonald, S. S. (2014, August). Paper reviewer, for The International Journal of Design in Society. Associate Editor. Paper: "Architecture for Autism, An."
- McDonald, S. S. (2014, May). Paper reviewer for The International Journal of Design in Society. Associate Editor. Paper: "Penetrable Bubble, A."
- McDonald, S. S. (2014, December). Paper reviewer for The International Journal of Design in Society. Associate Editor. Paper: "Photographer and Architects."
- McDonald, S. S. (2013, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #14-2566.
- McDonald, S. S. (2013, Fall). Paper reviewer for Transportation Research Board (TRB)

submittal, paper #14-0027.

- McDonald, S. S. (2013, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #14-3622.
- McDonald, S. S. (2013, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #14-5586.
- McDonald, S. S. (2013, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #14-4940.
- McDonald, S. S. (2012, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #13-1586.
- McDonald, S. S. (2012, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #13-1983.
- McDonald, S. S. (2011, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #12-1080.
- McDonald, S. S. (2010, Fall). Paper reviewer for Transportation Research Board (TRB) submittal, paper #11-3206.
- McDonald, S. S. (2010, Fall). Paper review: *Journal of Public Transportation*, Center for Urban Transportation Research, University of South Florida

Book:

McDonald, S. S. (2014, July). Book Proposal Review for: John Wiley and Sons, Inc. Sustainable Transportation and Development Planning/Funding/Results

E. Presentations at Professional Meetings:

- Solomon, C. & McDonald, S. S. (2015, November). Modernizing the WVU personal rapid transit system. PodCar City Conference, San Jose, CA. Retrieved from https://www.youtube.com/watch?v=fYJDsN1uiW0
- McDonald, S. S. (2015, April). *Solar, solar everywhere*. APEC (Association of Professional Energy Consultants) Southern Illinois Chapter. Carbondale, Il.
- McDonald, S. S. (2015, January). ATRA academic success and opportunities. TECHNIX, ATRA, University of Maryland, MD transportation class.
- McDonald, S. S. (2014, September). *Design in the 21 century, creating fully sustainable walkable communities with podcars or avnetworks*. PodCar City Conference, Arlanda Airport,
- Sweden. McDonald, S. S. (2014, September). *Development of drivelab by SIU masters students*. PodCar City Conference, Arlanda Airport, Sweden.
- McDonald, S. S. (2014, January). *High efficiency transit oriented development: a solution for Carbondale*. Presentation TECHNIX, ATRA Annual Meeting, University of MD.
- McDonald, S. S. (2012, January). Workshop 181 Ready for Automated Mobility. *TRB* (*Transportation Research Board*) Annual Meeting, Certificate of Appreciation.
- McDonald, S. S. (2006). Parking and architecture implications for PRT. ATRA, Santa Cruz, CA. McDonald, S. S. (2006). Connections: History's links to emerging trends and synergies in parking facility design. Canadian Parking Association, Edmonton, Canada.
- McDonald, S. S. (2006). Connections: Emerging movement-parking relationships supporting each other creating new American dreams - ideas and solutions for future transportation synergies. IPI (International Parking Institute) Conference, Nashville, TN.
- McDonald, S. S. (2005, June). Crossover technology; smart elevators, ATRA, parking, and architecture. International ATRA (Advanced Transit Association) Conference, Bologna, Italy.
- McDonald, S. S. (2005, June). Shifting Connections: New relationships in architecture and planning –innovations advancing its design -future synergies-connecting automated parking garages, personal rapid transit, planning, and design.

International ATRA (Advanced Transit Association) Conference, Bologna, Italy.

McDonald, S. S. (2008). Multiple Lectures: Smithsonian, Chicago Architecture Foundation, American Planning Association, University of Illinois, Chicago College of Urban Planning and Public Affairs, The School of the Art Institute of Chicago, Asheville AIA, ATRA in Boston, Georgia AIA Convention, and Society for Commercial Archeology.

McDonald, S. S. (1999). *History of the American parking garage*. Georgia/Carolinas pci, Hilton Head, SC.

F. Other

- McDonald, S. S. (2016, October). Sustainable Mobility for Rural Small University Towns (Panel Organization). ASA Fall Creative Research Symposium, SIU, Carbondale, IL. McDonald, S.
- S. Planning Committee; Student Charrette Organizer, PodCar City Conference 2016, Antrwep, Belgium
- McDonald, S. S. SBSE (Society of Building Science Educators) Retreat Proposal at SIU, Summer 2017
- Board Member of the Fuller Dome Home, 2012-current
- ATRA (Advanced Transit Association) video,

http://www.advancedtransit.org/library/news/atra-video/

- TRB/AUVSI AP020 Mid-Year meeting organization at TRB/AUVSI Automated Vehicles Symposium, Detroit, MI, 2015, 2014, 2013, 2012
- PodCar City, San Jose, CA, Session Organizer, 2015PodCar City, Coordinator student charrette with two SIU students at PodCar City conference in San Jose, 2015
- ATRA, Article for Transit Pulse: SIU Students Design Multi-Modal Station for Santa Cruz with PodCars, 2015 Example of newsletter

http://archive.constantcontact.com/fs117/1102621083285/archive/1119708996540.html

- Encitra and INIST, Coordinated paid work, for 4 SIU architecture students with Encitra and INIST for the City of Santa Cruz. University of Santa Cruz/Santa Cruz for a multi-modal station renderings, 2015
- ATRA, Initiated and managed the first Annual Martin Lowson Paper Award sponsored by the Lowson family, 2015
- TRB Committee AP040: Emerging and Innovative Public Transport and Technologies, Committee Triennial

Strategic Plan (TSP), 2012-2013

- Spoutwood Farm, Organized and led weekend Design Charrette for a Community Supported Agriculture and Community Resource Farm, 2004
- Evening at Emory, Developed an Evening at Emory Course titled "New Home? Addition? Or Renovation?" for educating Atlanta homeowners, multiple sessions, 2001- 2004
- AIA Georgia Fast Forward Convention 2000 Legacy Charrette and Architecture, Organized Competition for the Reynoldstown Community, concluding in a design build of winning student design by Southern Polytechnic Students and Bill Carpenter, Spring, 2000
- AIA Atlanta, Organized and managed the Buckhead Box Lunch Program for AIA Atlanta, 1999-2001

IX. COMMUNITY SERVICE

Participation in TRB 2017 Workshop on Rural Applications for Car Sharing Technologies

Wolverton, T. (2016, February). Self-driving cars promise a 'revolution' but not necessarily a positive one (quoted). The Mercury News. Retrieved from

http://www.mercurynews.com/troy-wolverton/ci_29512597/wolverton-self-driving-cars-promise-revolution-but-not

- Thompson, C. (2016, January-February). No Parking Here (Quoted). Mother Jones Magazine. Retrieved from http://www.motherjones.com/environment/2016/01/future-parking-self-driving-cars
- The Winchester Urban Village, CA., Kornhauser, A. & McDonald, S. S. (2015, November). "From Personal Assistant to Personal Chauffer". "Advanced Mobility It's Happening Elsewhere". The Winchester Urban Village, CA. Retrieved from

https://winchesterurbanvillage.wordpress.com/2015/10/18/ from-personal-assistant-to-personal-chauffeur/ Filmed: http://winchesternac.com/2015/11/12/advanced-mobility-its-happening-elsewhere/ and http://winchesternac.com/2015/11/12/share-the-roads-share-a-ride/

- McFetridge, S. (2015, January 27). Garages fall to wrecking balls. The Associated Press retrieved from http://www.denverpost.com/business/ci_27429349/garages-fall-wrecking-balls, Posted: 02/01/2015 12:01:00 AM MST, http://www.washingtontimes.com/news/2015/jan/27/once-ubiquitous-parking-garages-fall-t...http://m.news-journal.com/mobile/business/parking-garages-fall-to-the-wrecking-ball/artic... Posted: 2/15/2015
- Fuller, J. (2014, April 22). SIU NPR, Interviewed concerning automated vehicles.
- Science Café, the Science Center of Southern Illinois, Presentation: Automated Vehicles and Their Impact on Our Built World, Carbondale, IL, April, 2014
- TRB, Automation sub-committee TRB committee workshop organization, 2013

Colin Macinroe show (07/03/2013), Interviewed about parking retrieved from http://www.yourpublicmedia.org/content/channel/colin -mcenroe-show

- Smith, I. (2013, May 30). The Cairo Citizen, Isaac Smith. Youth Build enters sixth month. vol 126 no 23, pp. A1, A8.
- SIU Daily Egyptian, Interviewed, for use of I-clicker in the classroom, 2012
- McDonald, S. S. (November, 2012). The Fuller Dome: Bucky's Personal Residence Preservation Project: Carbondale, IL. do.co,mo.mo article.
- One day assisting Jon Davey at Harrisburg after tornado, 2012. Harrisburg Daily Register as well as other media coverage
- Olive Branch Charrette: Strategic Vision & Design Event, charrette participant, May 18-20, 2012

TRB Future of Road Automation committee initial workshop organization and attendance, Beckman Center, Summer 2012

WYNC Freakonomics Radio, Interviewed by for a show about the hidden side of parking, 2012

Article in Detroit News: "The book delves into the future of parking", September 29, 2011

- Lecture, SIU AIAS (American Institute of Architecture Students), Fall, 2011
- University of Maryland Department of Civil and Environmental Engineering, Lecture Students: Integrated Mobility, 2010
- D'Center Conversations, Presentation, Transportation Synergies, Baltimore, MD, 2010
- Baltimore Metropolitan Council, Bicycle and Pedestrian Advisory Group, Presentation: Bicycle Parking, 2010
- AIA Baltimore, Presentation Why and how to work with an architect: New home, renovation and preservation, 2010
- Upper Great Plains Transportation Institute at North Dakota State University and Cindy Urness, NDSU Department of Architecture, (www.surtc.org/shelter), Design-build for third year student bus stop project, 2007
- North Dakota State University, Lecture: 4th year Skyscraper Studio: Artelligent City" Engineering Civility Through 3-D Movement, 2004
- Airport Cooperative Research Board, Organized a multi-disciplinary research team of engineers and architects investigating the Interrelationship of Design, Energy, and Transportation "Shifting Connections", 2004
- New Jersey City University, Jersey City, invited by New Jersey Institute of Technology and Rutgers, Participated in Westside Avenue project Charrette, 2003
- Atlanta Greenprints Conference, Participated in Greenprints Charrette, 2003
- Tokyo Institute of Technology, Presentation to transportation faculty: Parking. 2003
- New Jersey Institute of Technology, Lecture: Infrastructure Class: Parking, 2003
- Georgia Institute of Technology, Lecture: Details class, 2003
- Alumni Fund Raising Yale University, Class Representative, 1994-2007
- Montana State University, Lecture: Man, Machine and Movement: a discussion concerning the idea of movement in architecture within the context of the evolution of design and planning in the 20th century, 2002
- AIA Georgia Convention, Legacy Planning Charrette for Savannah Georgia- Participated in "winning" team, 2001
- National Parking Association Board and Parking Consultants Council, Presentation: On Man, Machine, and Movement - upcoming book on garage design

- AIA Atlanta, Presentation: PALS, "Your Dream House" a talk helping homeowners to define their Dream home, 2001
- AIA Atlanta, Participated in AIA Atlanta Charrette for the Alabama Building Project, the downtown multimodal station, 2001

Participated in Community Charrette for Lincoln Nebraska State, Capital Mall Project, 2001

Southern Polytechnic University, Presentation: Architecture Research Methods – Class, Southern Polytechnic University, 2000

Savannah College of Art and Design, Savannah, GA: Presentation: The History of the American Parking Garage and Its Impact on the American City, 1999

Northwestern University Settlement House (NUSH), Evanston Board, Secretary, 1998

Young Women's Auxiliary of the Women's Club of Evanston, Community Service Chair, 1997 The Northwestern University Circle, NUSH Liaison, 1997

Baltimore County Public Schools, Art Coordinator, Baltimore County Art Exhibit, Towsontown Spring Festival, 1982-1987

President, Historic Towson, 1985-1987

Legislative Chairman, Burkeleigh Square Community Association, 1984-1986

President, Burkeleigh Square Community Association, 1982-1983