Keith Evan Green 1

January 2025

Keith Evan Green RA, PhD

Jean & Douglas McLean Professor in Human Centered Design | Professor in the Sibley School of Mechanical & Aerospace Engineering

office address	Cornell University
	202 HEB (Human Ecology Building)
	Ithaca, NY 14853-4401 USA
lab	Architectural Robotics Lab, 212 & 210 HEB (Human Ecology Building)
website	https://arl.human.cornell.edu/; my personal page;
email	keg95@cornell.edu

Research Focus

My *Architectural Robotics Lab* imagines rooms and their furnishings as robots that enable, support, and augment inhabitants. More practically, we design *robot-rooms*, and study how these rooms partner with people, and what people make of them and with them. We recognize the physical, built environment, from furnishings to the metropolis, as a new frontier of design, robotics, computing, and cognitive science.

focus areas Architectural Robotics; Interaction Design; HCI; HRI, Enabling Technologies. *applications* Healthcare & Wellbeing; Learning & Literacy; Individual & Collaborative Work, Play, and Creative Activity.

Education

1998	Ph.D. Architecture, University of Pennsylvania
advisors:	Marco Frascari, David Leatherbarrow, Joseph Rykwert, and Wendy Steiner.
thesis focus area:	Interactive environments and human-environment interaction.
1993	M.S. Architecture, University of Pennsylvania
1990	M. Arch., University of Illinois at Chicago under Director Stanley Tigerman
1985	B.A., University of Pennsylvania
	Psychology major; Member of PSI CHI, the National Honor Society in Psychology; English minor.

Academic Appointments

airea 2010	
since 2016	Cornell University (Ithaca, New York, USA)
home	 The Jean & Douglas McLean Professor in Human Centered Design (<u>HCD</u>)
joint	 Professor, Sibley School of Mechanical & Aerospace Engineering (MAE)(Robotics focus)
joint	• Professor, Robotics@Cornell (cross-departmental Ph.D. & undergrad Minor programs in Robotics)
graduate field	 Professor, Graduate Field of Information Science (<u>IS)(HRI focus</u>)
1999-2016	Clemson University (Clemson, South Carolina, USA)
home	 Professor and the Homer and Leola Mickel Endowed Chair, School of Architecture
joint	 Professor, Holcombe Department of Electrical & Computer Engineering
1994-99	University of Auckland / New Zealand
	 Lecturer in Architecture (British Lecturer ≈ USA Assistant Professor); Tenured (1997).

Key Administrative Appointments

Spring 2021	Interim Chair, Department of Design + Environmental Analysis, Cornell University
2010-19	Founding Director, Clemson U. Institute for Intelligent Materials, Systems & Environment
2001-03	Director, Clemson University Barcelona Architecture Center (BAC), Spain

Professional Memberships

Registered Architect (South Carolina #6610 – active; Washington #6036 – currently frozen) Senior Member, IEEE (Institute of Electrical and Electronics Engineers) #90609014 (9% are Senior) Member, ACM-SIGCHI (HCI, Association for Computing Machinery) # 9050700

Key Sponsored Research Projects



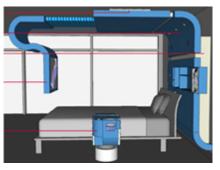


Robot-Rooms

AIM: Within the physical spaces where we live our lives—working, playing, learning, relaxing—we envision a robot that is neither life-like nor industrial but rather environmental. This is a new typology of robotics: a robot embedded in the walls, ceiling, furnishings, and floors of such physical spaces that gives form to and is adaptive to human activity. Robot-rooms actively reconfigure themselves to make many places – practical and escapist.

award: sponsor: Principal Investigator: Co-PIs: partners: project webpage: \$600,000 (#IIS-2221125; 2022-25) with \$8,000 REU support (2023-25) National Science Foundation | *Human Centered Computing* Keith Evan Green (PI, 56% share) I. Walker, Electrical & Computer Engineering The Gettys Group, Chicago, IL https://arl.human.cornell.edu/research_SPACES-for-health.html





home+

AIM: To design, prototype and evaluate an intelligent, physical environment featuring a suite of collaborative, robotic home furnishings distributed across any home. home+ aims to increase the quality of life of individuals with impaired mobility and/or cognitive functioning by intelligently enabling routine domestic activities that define independence.

award: sponsor: Principal Investigator: Co-Pls: partners: project webpage: \$606,218 (#IIS-1703267; 2016-21) with REU support National Science Foundation | Smart and Connected Health Keith Evan Green (PI, 34% share) I. Walker, Electrical & Computer Engineering. Greenville Hospital System, South Carolina https://arl.human.cornell.edu/research%20-%20home+vision.html





The LIT ROOM / The LIT KIT

AIM: To develop an evocative, literacy support tool for read alouds. The LIT ROOM is a novel suite of user-friendly, networked, "architectural robotic" artifacts embedded in the library. The LIT KIT is its transportable extension. These physical-digital environments are transformed by words read so that the everyday space of the library or classroom "merges" with the imaginary space of the book: *The book is a room*.

award: sponsor: Principal Investigator: Co-Pls: partners: project webpage: \$199,950 (#IIS-1352992; 2013-15) National Science Foundation | Human-Centered Computing Keith Evan Green (PI, 40% share) Ian Walker, Electrical & Computer Engineering, Susan Fullerton, Education The Richland County Public Library (Columbia, SC) https://arl.human.cornell.edu/research-LITROOM.html

Key Sponsored Research Projects (continued)





The Animated Work Environment [AWE]

AWE video accessed over 40,000 times.

AIM: To design, prototype and evaluate an articulated, programmable, interior environment embedded with information technologies facilitating productivity, connectedness and innovation across fluid assemblages of people working in a variety of locations and settings.

award: sponsor: Principal Investigator: Co-PIs: project webpage: \$400,000 (#IIS-0534423; 2005-09) National Science Foundation | *Human-Centered Computing* Keith Evan Green (PI, 34% share) L. Gugerty, Psychology; I. Walker, Electrical & Computer Engineering; J. Witte, Sociology https://arl.human.cornell.edu/research-AWE.html





The Assistive Robotic Table [ART]

AIM: To design, construct, field, and evaluate "ART," an Assistive Robotic Table supporting independent living. ART is one component in a suite of intelligent components collectively called *home+* that aims to increase the quality of life of healthy individuals as well as persons with impaired mobility, by intelligently supporting the physical organization of their immediate environment.

award: sponsor: Principal Investigator: Co-Pls: partners: project webpage: \$271,250 (#IIS-1116075; 2011-15)
National Science Foundation | Smart Health and Wellbeing
Keith Evan Green (PI, 40% share)
Ian Walker, Electrical & Computer Engineering; Johnell Brooks, Human Factors Psychology
Fraunhofer Institute, Kaiserslautern, Germany; Greenville Hospital System, South Carolina

https://arl.human.cornell.edu/research%20-%20comforTABLE.html

Larger Seed and Workshop Grants



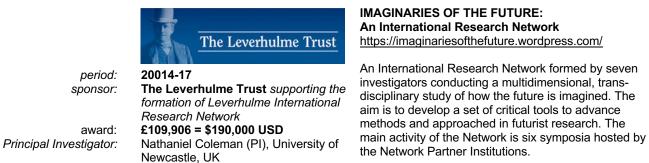


ARCHIBOTS – An International Workshop

ARCHIBOTS was a full-day workshop offered on September 30, 2009 in Orlando, Florida as part of *Ubicomp, the International Conference on Ubiquitous Computing.* ARCHIBOTS identified opportunities and challenges in research and education in the emerging area of "Architectural Robotics" - intelligent and adaptable physical environments at all scales.

award: sponsor: Principal Investigator: Co-Pls: project webpage: \$32,062 (#IIS-0925238; 2008-2009) National Science Foundation | Small Grant for Exploratory Research Keith Evan Green (PI) Mark D. Gross, Carnegie Mellon University http://workgroups.clemson.edu/AAH0503 ANIMATED ARCH/archibots.htm

Larger Seed and Workshop Grant (continued)



Keith Evan Green, Brian Greenspan (Carleton University, Canada), Kenneth Hanshew (University of Regensburg, Germany), Susan McManus (Queens University, Belfast), Tom Moylan (Limerick University, Ireland), Dan Smith (Chelsea College of Arts, London).

Gifts to My Lab

network members:

- 2022 **\$75,000 from The Gettys Group (Chicago, IL) supporting research in intelligent environments** One-year unrestricted support (for a PhD student in my lab).
- 2011 **\$1,573,455 from Siemens PLM in software supporting research in intelligent environments** This gift in-kind of software counted towards Clemson University's "*Will to Lead*" capital campaign.

Patents and Industry Support

patent pending #12/584,944: "Construction System and Resilient Non-Woven Structural Building Panels."

Academic Honors and Small Research Awards

2024	Engaged Opportunity Grant (David M. Einhorn Center for Community Engagement, Cornell). \$4,992 to support pilot research for "An Augmented Reality Approach to Giving People with ASD More Control Over Dental Experiences."
2024	CHE Engaged Research Seed Grant (College of Human Ecology, Cornell). \$4,000 to support pilot research for "Co-Designing Sensory-Friendly Dental Environments for Individuals with ASD."
2023	Named the Jean & Douglas McLean Professor in Human Centered Design
2022	Residential Child Care Project (RCCP), Brofenbrenner Center, Cornell University \$19,994 seed award supporting pilot research for "eMo-Bo: A Robotic Chatbox Supporting Positive Relational Processes between Children and Adults in Out-of-Home Care Settings.
2020	Engaged Cornell / DEA Curriculum Advancement Grant \$1,500 to support pilot research.
2015	Lee Gift Research Grant, Cornell \$10,000 to support pilot research.
2015	Named the <i>Homer Curtis Mickel and Leola Carter Mickel Endowed Chair in Architecture</i> This title came with a salary stipend, teaching release time, and developmental resources.
2014 host:	Visiting Professor, Industrial Design Engineering, TU Delft (The Netherlands) Visiting Professor at the Technical University of Delft for the Fall Semester. ID StudioLab (primary) and the Hyperbody Research Group (secondary)
2014	Awarded the Fulbright Visiting Chair in "Technology, Industry and the Environment" One of three Visiting Chairs awarded across Canada. (Declined to visit TU Delft – a better fit.) Hexagram Centre for Research-Creation in Media Arts & Technologies, Concordia U., Montreal.
host:	nexagram Centre for Research-Creation in Media Arts & rechnologies, Concoldia U., Montreal.

2006-09, 2012-16	AAH Faculty Research Fellowships, Clemson University Teaching release of 3 credits per semester or \$3000 to support research (e.g. book-writing).
2011-13	Named "Creativity Professor" in the College of Architecture, Arts & Humanities Salary supplement and developmental funds rewarding creativity in teaching and scholarship.
2005 <i>link</i> :	Thesis Studio selected by AIA/COTE for "best practices in sustainable design education" http://www.aia.org/cote_tides
2004 <i>link</i> :	Clemson University Board of Trustees 2003 Award for Faculty Excellence http://www.clemson.edu/awards/faculty/2003/facultylist.htm
2000	Council of Principal Investigators, Clemson University One of five junior faculty members across the University to receive this recognition.
1992-94	Fellowship, Ph.D. Program in Architecture, U. Pennsylvania Full tuition, fees, and living stipend for the two years in-residence
1989	A.I.A. Roche Traveling Scholarship
1989	The Schiff Prize in Architecture, the Art Institute of Chicago. First Prize (\$8000)
1989	National A.I.A. Foundation, Certificate of Merit
1989	U. Illinois John Entenza Scholarship for Architecture
1989	Women's Architectural League of Chicago Scholarship
1989-90	Graduate College Fellowship, U. Illinois at Chicago Full tuition, fees, and living stipend for one academic year
1987	Full-tuition scholarship, Academy of Art College, San Francisco
1985	Member, PSI CHI, the National Honor Society in Psychology
Published Books	PI is typically last author; [author]* denotes a student I supervise(d).
1.	Keith Evan Green. 2016. Architectural Robotics: Ecosystems of Bits, Bytes and Biology. Cambridge, MA: MIT Press. <u>https://mitpress.mit.edu/books/architectural-robotics</u>
2.	Keith Evan Green. 2011. Gio Ponti and Carlo Mollino. Trans. Y. Kishimoto. Tokyo: Kajima Press.

- 3. H. Houayek,* I. D, Walker, and K. E. Green. 2009. *The Animated Work Environment: An Architectural-Robotic System for a Digital Society.* Saarbrücken, Germany: Verlag.
- 4. Keith Evan Green. 2006. Gio Ponti and Carlo Mollino. New York: Edwin Mellen Press.

Contributions to Books | PI is typically the last author; [author]* denotes a student I supervise(d).

- M. Zhang* and K. E. Green. 2024. Smart Assistive Design Concepts for Enhancing Independent Living in Domestic Environments. In: M. Kanaani (ed.) The Routledge Companion to Smart Design Thinking in Architecture & Urbanism for a Sustainable Living Planet. pp. 255-265. DOI: 10.4324/9781003384113, ISBN: 978-1-032-46990-4 (hbk) ISBN: 978-1-032-46997-3 (pbk), ISBN: 978-1-003-38411-3 (ebk).
- K. E. Green. 2023. Robots in the Room: Robots Are the Room: The Future of Robotics, Architectural Design, and Domestic Routine. In: M. Kanaani (ed.) The Routledge Companion to Ecological Design Thinking: Healthful Ecotopian Visions for Architecture and Urbanism. Routledge. pp. 316-327. ISBN 9781032023892

- Y. Wang* and K. E. Green. 2023. How Do We Want to Interact with Robotic Environments? User Preferences for Embodied Interactions, from Pushbuttons to AI. Book Chapter. In P. Morel and H. Bier (ed.s) Disruptive Technologies: The Convergence of New Paradigms in Architecture. Springer Series in Adaptive Environments. New York: Springer, Cham. pp. 25-44. <u>https://doi.org/10.1007/978-3-031-14160-7_3</u>.
- C.H.A. de Aguiar* and K. E. Green. 2020. CommunIT Building. Book Chapter. In McCrickard D.S., Jones M., Stelter T.L. (eds) HCI Outdoors: Theory, Design, Methods and Applications. Human– Computer Interaction Series. Springer. <u>https://doi.org/10.1007/978-3-030-45289-6_12</u>
- A. Vijykumar, K. E. Green, and I. D. Walker. 2019, July. Book Chapter. A Scalable, Low-Cost, and Interactive Shape-Changing Display. In *Science and Information Conference*. K. Arai et al. (Eds.): SAI 2018, AISC 858, pp. 772–782. <u>https://doi.org/10.1007/978-3-030-01174-1_5</u>
- K. E. Green. 2018. "Dispositions and Design Patterns for Architectural Robotics." Book Chapter. In Robotic Building. ed.s Holger Schnädelbach, Henriette Bier, and Kristof Van Laerhoven. New York: Springer, pp. 121-138. <u>https://doi.org/10.1007/978-3-319-70866-9</u>
- K. E. Green. 2017. "The Convival ART of Vortical Thinking." Book Chapter. In Critical and Clinical Cartographies: Architecture, Robotics, Medicine and Philosophy. ed.s Andrej Radman and Heidi Sohn. Edinburgh, Scotland: Edinburgh University Press, pp. 143-167.
- 8. I. D. Walker and **K. E. Green**. 2009. "**Continuum Robots**." Book Chapter. In *The Encyclopedia of Complexity and Systems Science*. New York: Springer, pp. 1475-1485.
- 9. **K. E. Green**. 2000. *Aldo Rossi, Gio Ponti, Ernesto Rogers, Carlo Mollino, Domus*, ... Encyclopedia Entries. In the *Encyclopedia of Contemporary Italian Culture*. London: Routledge, various pages.
- 10. K. E. Green. 2005. Contribution to *Ecological Literacy in Architectural Education*. Report. In *AIA / Committee on the Environment Report on Sustainable Architecture. Reprinted in:* Ann Thorpe, *Designer's Atlas of Sustainability*, http://www.designers-atlas.net/teachguide.html.

Peer-Reviewed Journal Articles | *PI is typically the last author; [author]* denotes a student I supervise(d).*

- Y. Wang* and K. E. Green. 2023. How Do We Want to Interact with Robotic Environments? User Preferences for Embodied Interactions from Pushbuttons to Al. In: Morel, P., Bier, H. (eds) Disruptive Technologies: The Convergence of New Paradigms in Architecture. Springer Series in Adaptive Environments. Springer, Cham. pp. 25-44. https://doi.org/10.1007/978-3-031-14160-7_3.
- C. De Aguiar,* G. Leshed, T. Pinch, and K. E. Green. 2022. Evaluation of communIT, a Large-Scale, Cyber-physical Artifact Supporting Diverse Subgroups Building Community. *Journal of Smart Cities and Society* (2022), IOS Press, pp. 287-296. DOI: 10.3233/SCS-220007
- Y. Wang* and <u>K. E. Green</u>. 2022. Space Agency": A "Strong Concept" for Designing Socially Interactive, Robotic Environments. In: Li H. et al. (eds) Social Robotics. ICSR 2021. Lecture Notes in Computer Science, vol 13086. Springer, Cham. <u>https://doi.org/10.1007/978-3-030-90525-5_25</u>
- Y. Wang,* K. Das,* and <u>K. E. Green</u>. 2021. Are Robots Perceived as Good Decision-Makers? Investigation of Trust & Preference of Robot Referees. *Journal of Behavioral Robotics*, vol 12, pp. 287-296. DOI: <u>https://doi.org/10.1515/pjbr-2021-0020</u>. Available at <u>https://www.degruyter.com/document/doi/10.1515/pjbr-2021-0020/html</u>

- J. Brooks, C. Jenkins, D. Kocher,* Y. Wang,* R. Shield,* Z. Hawks, I. D. Walker, S. L. Tanner, R. G. Snider, and K. E. Green, K. E. 2021. Before coming home: The value of interaction studies with rehabilitation specialists using low-fidelity, physical prototypes prior to inserting novel assistive technologies into seniors' homes. *Smart Health*, Volume 22, 2021,100248. ISSN 2352-6483, https://doi.org/10.1016/j.smhl.2021.100248.
- A. Soleimani,* D. Herro, I. D. Walker, and K. E. Green. 2019. CyberPLAYce A Tangible, Interactive Learning Tool Fostering Children's Computational Thinking through Storytelling. International Journal of Child-Computer Interaction, Elsevier, 20C, pp. 9-23. https://doi.org/10.1016/j.ijcci.2019.01.002
- Green, K. E. 2018. Why Make the World Move? Motivations for Adaptive Environments, a Next Horizon of Human Computer Interaction. *Spool* (special Issue on "Robotic Building").
 4(1): 27-35. ISSN 2215-0897. Available at <u>https://journals.open.tudelft.nl/index.php/spool/issue/view/508/SPOOL_4_1</u>.
- Yanik, P.M.,* Threatt, A.L.,* Merino, J.,* Manganelli, J.,* Brooks, J.O., Green, K.E. and Walker, I.D. 2016. "A Novel Approach to Lifelong Learning for Robotic Response to Gesture." WSEAS Transactions on Computer Research, 4: 138–152.
- Kapadia, A.,* Walker, I. D., Green, K. E., Manganelli,* J., Houayek, H., James, A.,* Kanuri, V.,* Mokhtar, T.,* Siles I.,* and Yanik, P.* 2014. "A Novel Approach to Rethinking the Machines In Which We Live: A Multidisciplinary Course in Architectural Robotics." *IEEE Robotics and Automation Magazine* [RAM], 21(3) (September 2014): 143-150.
- Houayek, H,* Green, K. E., Gugerty, L. Walker, I. D. and Witte, J. 2014. "AWE: An Animated Work Environment for Working with Physical and Digital Tools and Artifacts." In *Journal of Personal and Ubiquitous Computing* [JPUC], June 2014, Volume 18, Issue 5, pp. 1227–1241.
- Yanik, P.M.,* Merino, J.,* Threatt, A.L.,* Manganelli, J.,* Brooks, J.O., Green, K.E. and Walker, I.D. 2014. "A Gesture Learning Interface for Simulated Robot Path Shaping with a Human Teacher." *IEEE Transactions on Human Machine Systems*, 44(1): 41–54.
- Manganelli, J.,* Threatt, A.,* Brooks, J. O., Smolentzov, L.,* Mossey, M., Healy, S., Merino, J.,* Yanik, P.,* Walker, I. and Green, K. 2014 (Fall). "Confirming, Classifying, and Prioritizing Needed Over-the-Bed Table Improvements via Methodological Triangulation." *Health Environments Research & Design Journal* [HERD], 8(1): 94-114.
- Manganelli, J.,* Threatt, A.,* Brooks, J. O., Merino,* J., Yanik,* P., Healy, S., ... Green, K. 2014. (Winter). "Examination of how and why over-the-bed tables are used: Use cases and needs from healthcare providers." *Health Environments Research & Design Journal* [HERD], 7(2), 104–126.
- Manganelli, J.,* Threatt, A.,* Brooks, J. O., Smolentzov, L.,* Mossey, M., Healy, S., Walker, I. and Green, K. 2013 (Spring). "Examination of Overbed Tables: Healthcare Provider and User Preferences." *Health Environments Research & Design Journal* [HERD], 6(3): 9–29.
- Brooks, J.O., Walker, I.D., Green, K.E., Manganelli, J.,* Merino, J.,* Smolentzov, L.,* Threatt, T.,* Yanik, P.M.,* Ficht, S.,* Kriener, R.,* Mossey, M., Mutlu,* A., Salvi, D.,* Schafer, G.,* Srikanth, P.,* & Xu, P.* 2012. "Robotic alternatives for bedside environments in healthcare." International Journal of Systems Applications, Engineering & Development. 4(6): 308-316.
- Brooks, J. O., Walker, I. D., Green, K. E., Manganelli, * J., Merino, * J., Smolentzov, L., * Threatt, T.* and Yanik, P.* 2012. "Robot Bedside Environments for Healthcare." International Journal of Circuits, Systems and Signal Processing, http://www.naun.org/journals/circuitssystemssignal [on-line]; and, Proceedings of the 12th WSEAS International Conference on Signal Processing, Robotics and Automation, (ISPRA '12), Cambridge, U.K, pp. 32–37.

- Brooks, J. O., Smolentzov, L.,* DeArment, A.,* Logan, W., Green, K., Walker, I., Honchar, J., Guirl, C.,* Beeco, R.,* Blakeney, C.,* Boggs, A.,* Carroll, C.,* Duckworth, K.,* Goller, L.,* Ham, S.,* Healy, S., Heaps, C.,* Hayden, C.,* Manganelli, J.,* Mayweather, L.,* Mixon, H.,* Price, K.,* Reis, A.* & Yanik, P.* 2011. "Toward a 'smart' nightstand prototype: An examination of nightstand table contents and preferences." *Health Environments Research & Design Journal* [HERD], 4(2), 91-108.
- Yanik, P.,* Manganelli, J.,* Smolentzov, L.,* Merino, J.,* Walker, I. D., Brooks, J., and Green, K. E., 2011. "Sensor Placement for Activity Recognition: Comparing Video Data with Motion Sensor Data." *International Journal of Circuits, Systems and Signal Processing,* Issue 3, vol. 5, 2011: 279–286.
- 19. Green, K. E. 2003. "Architecture After Capitalism Reply from Spain." *Praxis* 5, special issue on "Architecture after Capitalism."
- 20. Green, K. E. 1998. "Between Angels and Lovers: The Role of the Architect...." Architectural Theory Review, November, 1998, University of Sydney, pp. 32–44.
- 21. Green, K. E. 1996. "Whimsical Beginnings: A First-Year Design Studio." Review of the *Committee of Heads of Architecture Schools of Australia*, pp. 73–74.
- 22. Green, K. E. 1995. "Citadel: A Precise Anomaly." Interstices 3, July 1995, pp. 116–117.

Peer-Reviewed Papers in Proceedings

ACM/IEEE & Springer paper ~ journal-paper equivalent; PI is typically the last author; [author]* denotes a student I supervise(d).

- R. Cañete,* Y. Kedar and K. E. Green. 2024. e-MoBo, a Low-Cost, "Robo-Mediator" Helping Therapists Teach Children How to Express Emotions: Insights from Field Testing. 2024 33rd IEEE International Conference on Robot and Human Interactive Communication (ROMAN), Pasadena, CA, USA, 2024, pp. 1056-1061, doi: 10.1109/RO-MAN60168.2024.10731174. → "KAZUO TANIE" BEST PAPER AWARD
- Deanna Kocher,* Tamar Kushnir and Keith Evan Green. [In-press]. MAPLE: A Multi-Agent, Prosocial Learning Environment, Engaging and Motivating Children, 7th International IEEE ROBOT Conference, Madrid, Spain 2024, pp. tbd, doi: tbd.
- N. Kumar,* H. -M. Chao,* B. D. Da Silva Tassari,* E. Sabinson,* I. D. Walker and K. E. Green. 2024. Design of Two Morphing Robot Surfaces and Results from a User Study On What People Want and Expect of Them, Towards a 'Robot-Room', 2024 IEEE International Conference on Robotics and Automation (ICRA), Yokohama, Japan, 2024, pp. 11239-11244, doi: 10.1109/ICRA57147.2024.10611246.
- O. Brooks, J., F. Jenkins, C., L. Tanner, S., D. Walker, I., and Evan Green, K. 2024 Step-by-step: Using low-fidelity, physical prototypes of enabling technologies to gain feedback from clinicians, prior to older patients, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), DRS2024: Boston, 23–28 June, Boston, USA. <u>https://doi.org/10.21606/drs.2024.355</u>
- Elena Sabinson,* Jack Neiberg,* and Keith Evan Green. 2024. With Every Breath: Testing the Effects of Soft Robotic Surfaces on Attention and Stress. In Proceedings of the 2024 ACM/IEEE International Conference on Human-Robot Interaction (HRI '24). Association for Computing Machinery, New York, NY, USA, 611–620. https://doi.org/10.1145/3610977.3635004.
- Elena B. Sabinson* and Keith Evan Green. 2023. A Walk in Nature: Exploring the Creative Potentials of a Generative Design Tool for Soft Robotic Surfaces that Foster a Connection with Nature. In Proceedings of the 15th Conference on Creativity and Cognition (C&C '23). Association for Computing Machinery, New York, NY, USA, 185–199. <u>https://doi.org/10.1145/3591196.3593367</u>

- 7. Ge Guo,* Gilly Leshed, and Keith Evan Green. 2023. "I normally wouldn't talk with strangers": Introducing a Socio-Spatial Interface for Fostering Togetherness Between Strangers. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23), April 23– 28, 2023, Hamburg, Germany. ACM, New York, NY, USA Article 272, 1-20. https://doi.org/10.1145/3544548.3581325 → HONORABLE MENTION AWARD
- Carlos Henrique Araujo de Aguiar,* Trevor Pinch, and Keith Green. 2022. De-scription at early phases of artifact design. In *Proceedings of the 25th International Academic Mindtrek Conference* (Academic Mindtrek '22). Association for Computing Machinery, New York, NY, USA, 179–191. https://doi.org/10.1145/3569219.3569380
- Deanna Kocher,* Emily Hana Abbruzzese,* Olivia Rodriguez,* Julia Mayourian,* and Keith Evan Green. 2022. Sapling & the Travelling Forest: A table-top mobile robot platform for child-robot games. In Interaction Design and Children (IDC '22). Association for Computing Machinery, New York, NY, USA, 621–624. https://doi.org/10.1145/3501712.3535273
- G. Tan,* H. Hidalgo,* H. H-L. Kao, I. D. Walker, and K. E. Green. 2022. A Continuum Robot Surface of Woven, McKibben Muscles Embedded in and Giving Shape to Rooms, 2022 International Conference on Robotics and Automation (ICRA), Philadelphia, PA, USA, 2022, pp. 11432-11437, doi: 10.1109/ICRA46639.2022.9811987.
- Y. Wang* and K. Evan Green. 2022. Designing Socially Interactive, Robotic Environments through Pattern Languages. 2022 18th International Conference on Intelligent Environments (IE), Biarritz, France, 2022, pp. 1-8, doi: 10.1109/IE54923.2022.9826761.
- Yixiao Wang* and Keith Evan Green. 2021. Space Agency: A 'Strong Concept' for Designing Socially Interactive, Robotic Environments. In Social Robotics: 13th International Conference, ICSR 2021, Singapore, November 10–13, 2021, Proceedings. Springer-Verlag, Berlin, Heidelberg, 295–307. https://doi.org/10.1007/978-3-030-90525-5 25
- Sabinson, E.,* Pradham, I.,* and Green, K. E. 2021. Plant-Human Embodied Biofeedback (pheB): A Soft Robotic Surface for Emotion Regulation in Confined Physical Space. In Proceedings of TEI 2021, the Fifteenth International Conference on Tangible, Embedded, and Embodied Interactions (TEI 2021). ACM, New York, NY, USA, Article no. 89, pp. 1-14, <u>https://doi.org/10.1145/3430524.3446065</u>.
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- 28. Green, K. E. 2008. AWE: An Intelligent Environment Supporting Digital and Tactile Design Manipulation. Workshop Proceedings of DC+C [Design, Computing + Cognition] 2008, Atlanta.
- 29. Green, K. E. 2008. The Interactive, Adaptive 'AWE' Work Station. Interactive and Adaptive *Furniture*, hosted by Microsoft Research/University or Aarhus, Denmark.
- 30. Green, K. E., Gugerty, L., Walker, I., and Witte, J. C. 2007. An Animated Work Environment Supporting Working Life in a Digital Society. Poster presented at *ACADIA 2007*, Halifax, Nova Scotia.
- Green, K. E., Gugerty, L. J., Witte, J. C. and Walker, I. D. 2006. Three Robot-Rooms / The AWE Project. Proceedings of 2006 CHI: the ACM Conference on Human Factors in Computing Systems, Montreal, Canada, April 2006, pp. 809–814.

Design Awards by Jury-Review

- 1. Green, K. E. and Houayek, H.* 2008. *An Animated Work Environment for Architects of the Info-World* for the "DI Designers' Workstation" International Competition. A physical, robotenabled workstation for the designers of an increasingly digital world.
 - award: Competition Winner Third Prize in Professional Category (and only USA winner)
 - *exhibition:* Featured at "The Oporto Show" Trade Fair of Design, Interiors and Architecture, Portugal.
- 2. Green, K. E. 2003. Houses of Ivy: An Affordable, Sustainable House Prototype.
 - *award:* Competition Winner, the HOME House project. One of 25 winners from 440 design proposals in this international competition; Touring exhibit. Book publication.
 - link: http://www.secca.org; also overviewed in ArtNews, ArtPapers, Architectural Record....
- 3. Green, K. E., Brand, D. and Architectus. 1997-99. Viaduct Basin, an Urban Waterfront Design for the America's Cup, Auckland, New Zealand.
 - award: International competition first-prize and contract for the work (completed).
 - award: New Zealand Institute of Architects/Auckland Award for Architecture (2000).
- 4. Green, K. E. 1995-99. *Domus Farfalla*: A residence across two disparate sites to accommodate a family after the death of a member.
 - award: Selected for exhibition at The Art Institute of Chicago (Chicago, Illinois).
- 5. Green, K. E. as *Project Lead Designer* at NBBJ. 1991. *Eddie Bauer Prototype Retail Store Prototypes*.
 - award: Competition-winning design and contract for the work.
- 6. Green, K. E. as *Project Architect* at RAS. 1990-91. Lake Pointe Condominiums, Seattle, Washington.
 - award: Competition-winner for contract (completed)
 - award: MAME-NW award for "Best Multi-Family Project" and "Best Floor Plan."
- 7. Green, K. E. 1989. The Life Cycle House (design project)
 - Permanent collection, Art Institute of Chicago
 <u>https://www.artic.edu/artists/10225/keith-evan-green</u>
 - award: The Schiff Prize in Architecture, the Art Institute of Chicago. First Prize (\$8000)
 - award: The O'Donnell Wicklund, Pigozzi & Peterson Prize "for Outstanding Project Design."

Design Works Selected by Major Museum Collections and Catalogues

- Green, K. E. 2003. Houses of Ivy: An Affordable, Sustainable House Prototype. Catalogued in: Brown, David J. The HOME House Project: The Future of Affordable Housing (Cambridge, MA: MIT Press, 2004).
- 2. Green, K. E. Domus Farfalla: A residence across two disparate sites to accommodate a family after the death of a member. Permanent Collection, *The Art Institute of Chicago* (Chicago, Illinois)
- 3. Green, K. E. *The Life Cycle House* Permanent Collection, *The Art Institute of Chicago* (Chicago, Illinois)
 - link: https://www.artic.edu/artworks/242063/life-cycle-house-schiff-foundation-fellowshippresentation-drawings

Design Exhibitions-selected

- 1. **Green, K. E.** with Henrique Houayek.* 2008. *Designers Workspace* Competition Winner. Featured at "The Oporto Show" Trade Fair of Design, Interiors and Architecture, Portugal.
- 2. **Green, K. E.** 2003-6 "**Houses of Ivy.**" Arizona State U.; U. Minnesota; El Paso Museum of Art; University of Maryland, and 5 other university museums and museums of art.
- 3. Green, K. E. 1999-00. Life-Cycle House" and "Domus Farfalla" The Art Institute of Chicago

Non Peer-Reviewed Publications (selected)

- 1. Pillan, M., Bier, H., **Green, K. E.**, and Pavlovic, M. 2020. **Animated and Performative Architecture.** SPOOL (TU Delft) v7 issue3, pp. 3-4. ISSN 2215-0897; E-ISSN 2215-0900.
- 2. Bier, H. and Green, K.E. 2019. Dialogs on Architecture: Actuated and Performative Architecture: Emerging Forms of Human-Machine Integration. SPOOL (TU Delft) v6 issue1, pp. 49-54. ISSN 2215-0897; E-ISSN 2215-0900; OPEN ACCESS.
- 3. **Green, K. E.** "**Giò Ponti and his fabulous Villa Planchart.**" 2013. *Italian 9: Ubiquitous Influences.* Volume 20. Number IX. 2013, in-print and on-line at http://magazine.italianjournal.it/house-and-impermanence-milanese-architect-gio-pontis-unforgettably-philosophical-bent/.
- 4. Gross, M. D. and **Green, K. E.** 2012. "**Architectural Robotics, Inevitably.**" *interactions*, vol. xix.1 (January + February 2012), pp. 28-33. My article establishing "architectural robotics" as a research domain in the ACM CHI community. http://mags.acm.org/interactions/20120102#pg1.
- 5. **Green, K. E.** and Ellison, M. 2009. **"Non-Woven Fabrics as Structural Building Materials."** A paper selected for presentation at Clemson University's Summit on Advanced Materials.
- 6. Green, K. E. and Houayek. H.* 2008. "An Animated Work Environment for the Info-World." [widely publicized on the internet, e.g. IEEE homepage]
- 7. Green, K. E. 2005. "House of Ivy" in SOUTH. Clemson University Press. Clemson, SC.
- 8. **Green, K. E.** 2004. **"Winning Designs."** *Clemson World*, pp. 20-21. http://cworld.clemson.edu/archive/2004/spring04/feature4.htm
- 9. **Green, K. E.** 2004. **"Art of the Machine: New Self-Sustaining 'SURGE' Hospitals."** *Proceedings of the 2004 AIA* Health Architecture Conference, Washington, 9 pages.
- 10. Green, K. E. 2004 (Spring). "Architecture is a Butterfly." CRiT 57, pp. 32-34.
- 11. **Green, K. E.** 2000. **"Art of the Machine: A Mobile Medical Hospital."** *Proceedings of the 2000 AIA* Health Architecture Conference, Vancouver, 9 pages.
- 12. Green, K. E. 1998 (September). "Engaging Design: Salone 1998." Architecture New Zealand, pp. 92-96.
- 13. Green, K. E. 1995 (June). "The Elevated Ship." Auckland Architecture Quarterly, pp. 13-16.
- 14. Green, K. E. 1992 (July./August). "The Fantasy of Architectural Detailing." Arcade, p. 11.

- 15. Green, K. E. 1991 (December). "Interview with Steven Holl" on his "Edge Cities" exhibition). *Arcade*.
- 16. Green, K. E. 1991 (August). "Carlo Forcolini" (Review of lecture and exhibit). Arcade.
- 17. Green, K. E. 1991 (December). "Mi[e]s perceptions." Arcade, cover page, pp. 8-9.
- 18. Green, K. E. 1990 (September) "The Reawakening of Constructivism." Arcade. pp. 12-13.

Invited Lectures and Presentations (selected)

- 2022 Northeastern University, Center for Design "Design for Collaborative Robotic Environments."
- 2020 TU Delft, Architectural Robotics Lecture ""Ecosystems of Bits, Bytes, and Biology"
- 2018 Long(er) Term Design Workshop, Info. Sci., University of Washington Distinguished Conversation
- 2018 Sibley School of Mechanical & Aerospace Engineering Colloquium Series "Architectural Robotics"
- 2017 Border Session, The Hague (Europe's SXSW Tech Conference) "'Robots for Living In'"
- 2016 Game Set Match 3 Symposium, TU Delft "Ecosystems of Bits, Bytes, and Biology"
- 2014 Critical and Clinical Cartographies Conference, TU Delft "The ART of Vortical Thinking"
- 2014 Georgia Tech, Industrial Design and School of Computing "Architectural Robotics"
- 2013 Carnegie Mellon University, School of Computer Science "Architectural Robotics"
- 2013 University of North Carolina Charlotte, CS/MArch Dual-Degree Launch "Architectural Robotics"
- 2012 University of Texas Arlington, ECE Department Lecture Series "Architectural Robotics"
- 2007 RPI (Rensselaer Polytechnic University) "Animated Architecture"

Editorship, Peer-Reviewing, and other Professional Services

Editorial Board	Adaptive Environments Book Series, Springer Publishing
Editor	SPOOL (peer reviewed journal of architecture and design), v7 issue3 . Ed.s. Margherita Pillan, Henriette Bier, Keith Green, and Milica Pavlovic. 2020. Issue dedicated to " <u>Situated and</u> <u>Performative Architecture: Emerging Forms of Human-Machine Interaction</u> ." ISSN 2215-0897.
Invited Facilitator	NSF Engineering Design and Systems Engineering (ESD/SYS) Workshop
Session Chair	 IEEE RO-MAN • "Human Centered Design of Robots" IEEE IROS • "Biologically-Inspired Robots" IEEE RO-MAN • "Degrees of Autonomy and Teleoperation" IEEE IROS [Intelligent Robots and Systems] • "Novel Robot Designs" Fiber Society International Meeting • "Smart Textiles in Clothing & the Built Environment" Meeting of the Association of Collegiate Schools of Architecture • "Digital Aptitudes"
Progr. Committee	DIS 2010 – ACM International Conference on the Design of Interactive Systems
Co-Convener	 Adaptive Environments Symposium 2021, Politecnico di Milano, September 9-10, 2021 "Utopia after the Human," <i>Leverhulme Trust</i> International Symposium, Cornell, April 11-12, 2017. "Interaction and Architectural Space" workshop, CHI 2014 "Ar-CHI-tecture" workshop, CHI 2012 Graduate Student Symposium, ACM C&C – ACM Intern'l Conf. on Creativity & Cognition "ARCHIBOTS" workshop, UBICOMP 2009 • PI, \$32,062, NSF-CISE SGER #IIS-0925238.
Reviewer	Journal of Architectural Education ACM C&C • The ACM International Conference on Creativity & Cognition Adaptive Environments book series (Springer) ACSA • The Association of Collegiate Schools of Architecture CHI • The ACM International Conference on Human Factors in Computing Systems

Journal of Child Development DIS • The ACM International Conference on the Design of Interactive Systems Einstein Foundation, Berlin – Strategic Professorships at Berlin Universities ETH Zurich Research Commission FOOTPRINT • The Journal of Digitally Driven Architecture, TU Delft, Netherlands Francis & Taylor • Robotics books. HRI • The ACM/IEEE International Conference on Human-Robot Interaction ICRA • The IEEE International Conference on Robotics and Automation IDC • The ACM/IEEE International Conference on Interaction Design and Children IEEE ICDL • IEEE International Conference on Development and Learning Johns Hopkins University Press Interacting with Computers Journal, Oxford University Press International Journal of Architectural Computing IROS • The IEEE/RSJ International Conference on Intelligent Robots and Systems National Science Foundation, CISE, Intelligent Systems Netherlands Organization for Scientific Research RA Letters • The IEEE Robotics & Automation Letters Journal Routledae SPOOL • Peer-reviewed, indexed journal of architecture published by TU Delft TEI • The ACM International Conference on Tangible, Embedded, and Embodied Interaction UIST • The ACM Symposium on User Interface Software and Technology Pervasive • The ACM International Conference on Pervasive Computing RO-MAN • The IEEE International Symposium on Robot and Human Interactive Communication University of Texas Press

Cornell University | Teaching and Supervision | 2016 to date

Ph.D. Thesis Committee Chair – Ph.D. in Information Science (IS)

Since 2021	Chair for Serena Guo
Topic:	Cyber-physical environments cultivating togetherness amongst strangers.
Since 2024	Chair for Borui Wang
Topic:	Artificial Robot-Landscapes.

Ph.D. Thesis Committee Chair – Ph.D. in Human Behavior and Design (DEA)

Since 2024	Chair for Sharmayne Lim
Topic:	Robot-Room—Design and Interface.
Graduated 2023	Chair for Elena Sabinson, PhD DEA
Topic:	"pheB": Bio-Cyber-Physical Architecture for achieving homeostasis in confined spaces.
Appointment:	Assistant Professor (Tenure-Track), Design, U. Colorado-Boulder.
Graduated 2022	Chair for Megni ("Ni") Zhang, PhD DEA
Topic:	"SORT": Wall-climbing robots for storing, delivering, and retrieving things, enabling independence.
Appointment:	Assistant Professor (Tenure-Track), Industrial Design and iSchool, U. IL Urbana-Champaign.
Graduated 2021 Title: Appointment:	Chair for Carlos Henrique Araújo De Aguiar, PhD DEA Building Community with transFORM, a Cyber-Physical Environment for Diverse Groups to Collaboratively Generate and Exhibit Media in Underused Public Spaces, Indoors and Out. Assistant Professor (Tenure-Track), Industrial Design and iSchool, U. IL Urbana-Champaign.
Graduated 2020	Chair for Yixiao Wang, PhD DEA
Title:	Space Making Robots as "Agents": A Design Paradigm Based on Human-Agent Interaction
Appointment:	Assistant Professor (Tenure-Track), Industrial Design, Georgia Tech

Ph.D. Visiting Fulbright Supervisor in Human Centered Design

2024 Supervisor for Raquel Cañete Yaque, Fulbright Scholar and PhD student, U. of Seville (Spain)

M.S. Thesis Committee Chair – Mechanical Engineering (MAE)

Graduated 2023	Chair for Deanna Kocher
Topic:	Child-robot collaboration towards understanding and cultivating child development and learning.
Award (2020):	NSF GRFP (Graduate Research Fellowship Program); Tuition and Stipend for 3 years

M.Eng. Chair – Mechanical Engineering (MAE) or otherwise specified

Graduated 2024	Supervisor for Katelyn Ma Iterative design and fabrication of a table-and-lamp enabling robot.
Beginning 2024	Supervisor for John Momeni Iterative design and fabrication of a robot-room, focusing on its continuum-robot ceiling.
Beginning 2024	Supervisor for Yi Yuyang Iterative design and fabrication of a table-and-lamp enabling robot.
Graduated 2023	Supervisor for Bruno Dantas de Silva Tassari Design and fabrication of Robot Room surfaces.
Graduated 2023	Supervisor for Robert Shield Iterative design and interoperability of assistive robot furniture for the home.
Graduated 2022	Supervisor for Rick Wang Iterative design and interoperability of assistive wall-climbing and furniture robots.
Graduated 2022	Supervisor for Kevin Liu Iterative design and interoperability of wall-climbing assistive robots.

Graduated 2021	Supervisor for Ethan Valentine Designing and fabricating a "wand" interface and robot sensing for Child-Robot Interaction.
Graduated 2021	Supervisor for Mark Worsley Advanced a suction-cup, vacuum pump, wall-climbing robot for SORT
Graduated 2021	Supervisor for Olivia Roberts Localization for SORT robots and advancing the home+ table robot design.
Graduated 2021	Supervisor for Jilly Cai An Architectural Robotics Platform for Delivering Outdoor, Public Library Services During COVID.
Graduated 2021	Supervisor for Harrison Hidalgo Design of Woven and Knit Robot Surfaces
Graduated 2020	Supervisor for Juliette Bendheim Design/Motion Planning of Continuum Robot "Fin" of a Non-Humanoid Robot for Child-Robot Learning
Graduated 2020	Supervisor for Isha Pradhan Design of Soft Robot Surfaces for Homeostatis of Inhabitants in Confined Environments
Graduated 2020	Supervisor for Yupei Yang (Computer Science) Machine Learning for Error-Prone Robot Parnters Partnering with Young Children in Spatial Tasks
Graduated 2020	Supervisor for Seshasowri Chunduri (Systems Engineering) Design of McKibben-Actuated Robot Surfaces
Graduated 2020	Supervisor for Justin Jacobs Design of Interfaces for home+
Graduated 2019	Supervisor for Kevin Guo Design of Interfaces for transFORM, a Room-Scaled Reconfigurable Environment for Under-Used
Graduated 2019	Supervisor for Yeolim Jo Design of Interfaces for transFORM, a Room-Scaled Reconfigurable Environment for Under-Used
Graduated 2019	Supervisor for Katherine Roberts Design of Interfaces for transFORM, a Room-Scaled Reconfigurable Environment for Under-Used
Graduated 2019	Supervisor for Yuxin Zhou Design of a Wireless Interface for Robot Surfaces, Created in <i>Unity</i> for Tablets and Smartphones.
Graduated 2019	Supervisor for Richa Sirohi (System Engineering) Systems Engineering of a Continuum Robotic Surface for Spacecraft and Space Habitation.
Graduated 2019	Supervisor for Christian Ray Two Robot Grippers: One for Enabling Robotics, One for Robot Surfaces
Graduated 2018	Supervisor for Roanja Milo Towards Mutual Cognitive Development in Children and Robots through their Interaction.
Graduated 2018	Supervisor for Samantha Hollenberg Kinematics of a Continuum Robotic Surface for Small, Physically Adaptive, Cognitive Spaces (Focus Application: Themed Entertainment).
Graduated 2018	Supervisor for Alex Bernard) Design, Kinematics, and Prototyping of transFORM, a Room-Scaled Reconfigurable Environment for
award link	Under-Used Public Space to Make Visible Under-Represented Citizens. The <i>McManus Design Award</i> for a graduating student of the Sibley School of Mechanical & Aerospace Engineering, "based on a technical paper presenting an original solution to a design problem." <u>http://www.mae.cornell.edu/mae/academics/upload/Award-Recipients-Final-Posting-2018.pdf</u>
Graduated 2018	Supervisor for Christina Keefe Child – Robot Learning using Non-Humanoid Robots.

M.S. Thesis Committee Chair – M.S. in Human Behavior and Design (DEA)

Graduated 2024	Chair for Hsin-Ming Chao Interactive and Intelligent Ambient Lighting Supporting Activities of Daily Living.
Graduated 2019	Chair for Kaustav Das An interactive cyber-physical artifact for healthcare.
Graduated 2019	Chair for Paulina Villacreces An interactive cyber-physical artifact for healthcare.

M.S. and Ph.D. Thesis Committee Member – Design, MAE, Psychology

since 2022	Committee Member for David Tompkins, Ph.D. student, Psychology/Human Development How technological changes in the home affect early development, and particularly early learning.
Graduated 2022	Committee Member for Michael Suguitan, Ph.D. student, MAE (Robotics) "At Least, Be Human: Humanizing the Robot as a Medium for Communication. "
Teaching	
Fall semesters	DEA 6210 Architectural Robotics Architectural robotics is defined as intelligent and adaptable built environments (featuring embedded robotics) that sense, plan, and act. This class: (1) grapples with larger research challenges in architectural robotics, and (2) asks interdisciplinary student teams to design an architectural robotic artifact responsive to one of these challenges.
Fall semesters	DEA 2730 Human-Centered Design Methods Focused on methods for designing for and with people in an increasingly cyber-physical world, with its many challenges and opportunities. Course topics include: design conceptualization, scenarios, videography, prototyping, collaborative design, usability, observations, Interviews, surveys, and "RtD." While the methods considered apply to design broadly, Interaction Design and HCI are emphasized.
Spring semesters	DEA 5210 Interaction Design The built environment made interactive and adaptive by embedded computation has great promise to support and augment us at work, school, and home, as we roam, interconnect, and age. Students in interdisciplinary teams will design and prototype artful, meticulous, cyber-physical artifacts and environments responsive to specific challenges of an increasingly digital society.
Both semesters	DEA 4010/6020, MAE 4900/6900, INFOSCI 4900/7900, and DEA 9990 Independent research/directed studies courses I offer. I typically have 1-6 students enrolled in each course or pair of courses listed (typically 6 to 15 students/semester).

Summer Research Supervisor for Undergraduates Awarded Research Support

Summer 2024	Simone Jacobs (HCD)
Award	"College of Human Ecology Summer Research Stipend" (\$1000)
Summer 2020	Jackson Hardin (MechE)
Award	"Educational Learning Initiative" Fellowship, College of Engineering (\$2645)
Summer 2019	Robert Shield (MechE)
Award	NSF Research for Undergraduates (\$4000)
Summer 2017	Liheng Li (ECE)
Award	"Educational Learning Initiative" Fellowship, College of Engineering (\$4000)
Summer 2017	Audrey Tirtohadiguno (DEA)
Award	"Summer Research," College of Human Ecology (\$4000)

Service to Cornell University and the General Public

2022-24	Chair, Faculty Search Committee, Cornell U. Human Centered Design.
2024	Session Chair, "Robots in Education, Therapy and Rehabilitation," IEEE RO-MAN 2024.
2017, 20, 24	Reviewer, tenure and promotion cases, College of Human Ecology, Cornell.
2024	External Reviewer, tenure and promotion cases, University of Michigan.
2024	Invited Speaker, Women in Computing at Cornell.
2024	Member, Selection Committee for Staff Awards, College of Human Ecology, Cornell.
2022-date	Member, Qualifying ("Q" Exam) Committee for PhD stuents in Mechanical Engineering, Cornell.
2005-date	Panelist, National Science Foundation, CISE, Intelligent Systems.
2022	Speaker for an evening event in Chicago with CHE alumni, hosted by Stephanie and Tim Barry.
2022	Member, Design +Technology Faculty Task Force, Cornell U.
Spring 21	Interim Chair, Department of Design + Environmental Analysis (DEA), Cornell U.

2019-21	Co-Chair, College of Human Ecology DEA-FSAD Integration Committee.
2021	Session Co-Chair, "Human Centered Design of Robots," IEEE RO-MAN 2021.
2021	Session Co-Chair, "Biologically-Inspired Robots," IEEE IROS 2021.
2021	Information Science Faculty Participant, IS Summer School for Social Impact.
2020-21	Co-Chair, CHE Committee exploring the Integration of Departments DEA and FSAD.
2019-21	CHE Representative, Cornell Office of Faculty Development & Diversity's Advisory Board.
2020	Invited Speaker, Young Researchers Initiative; attendees from Peru, Nairobi, Kenya,
2020	Member, Promotion Committee for Full Professor in Mechanical Engineering, Cornell.
2020	Member, Strategic Planning, Mechanical & Aerospace Engineering, Cornell
2020	Session Chair, "Degrees of Autonomy and Teleoperation," IEEE RO-MAN 2020.
2020	Speaker, Young Researchers Program for High School Students.
2020	External Assessor, Tenure and Promotion, Chajoong (CJ) Kim, UNIST ID.
2019	External Assessor, Promotion to "Chair," University of Newcastle.
2018-date	Invited Critic, Cornell Architecture midterm and final reviews.
2018	Invited Speaker, Cornell CHE Advisory Board Meeting.
2017-18	Chair, DEA faculty search committee, Cornell U.
2017	Reviewer, tenure case, University of Buffalo School of Architecture.
2017	Member, CHE committee on Digital Design and Fabrication Studios, Cornell U.
2017	Member, Cornell U. committee reviewing the Cornell Research website.
2017	Member, thesis committee for PhD student Alex Cheng, TU Delft (Netherlands).
2016-17	Co-convener, "Utopia after the Human" International Symposium, Cornell.
2016-17	Member, Design Task Force (feasibility of cross-campus initiative), Cornell U.
2016-17	Development of new grad concentration: Emerging Technologies for Design.
2016	Creation of new course: DEA 4210 Interactive and Adaptive Environments
2016	Revision of existing course as new core: DEA 2730 Human Centered Design Methods

Clemson University | Teaching, Supervision, and Administration | 1999-2016

Ph.D. Thesis Supervision (Committee Chair) – Ph.D. PDBE in Architectural Robotics

- for Arash Soleimani, PDBE CyberPLAYce: A Cyber-Physical-Spatial Learning Environment. graduated 2015
- graduated 2015 for George Schafer, PDBE • The LIT KIT: A Cyber-Physical Environment Supporting Literacy (NSF)
- graduated 2013 for Anthony Threatt, PDBE • ART: An Assistive, Robotic Table for Post-Stroke Patients (NSF)
- for Joe Manganelli, PDBE A Model-Based, Human-Centered Design & Analysis Method/Tool graduated 2013 for Tarek Mokhtar, PDBE • Monumental-IT: A Robotic Monument Configured by Lay Citizens
- graduated 2011 for Henrique Houayek, PDBE • AWE: A Robotic "Animated Work Environment (NSF)
- graduated 2009

Ph.D. Thesis Committees – Electrical & Computer Engineering and other programs

for Maryam Hamidpour, PhD PDBE • Integration of Smart Glazing in Buildings graduated 2016 graduated 2016 for Nixon Wonoto, PhD PDBE • Early Parametric Design/Optimization of Tessellated Structure for Michael Wooten, PhD ECE • Tendril Robots for Space (NASA/NSF-NRI) graduated 2016 graduated 2014 for Niraj Poudel, PhD PDBE • Phase-Change Materials for Architectural Design graduated 2013 for Paul Yanik, PhD ECE • Emergent Gesture Recognition for Architectural Robotics (NSF) graduated 2012 for Vidva Murali, PhD ECE • Low-resolution Vision for Autonomous Mobile Robots

M.S. Thesis Committees – Electrical & Computer Engineering and Psychology

Committee Member for Siddharth Verma (ECE) • Continuum Robotics graduated 2017 Committee Member for Ryan Scott (ECE) • Continuum Robotics graduated 2017 graduated 2017 Committee Member for Sean Reinaldo Gift (ECE) • Continuum Robotics graduated 2015 Committee Member for Amith Mysore Vijaykumar (ECE) • An Interactive shape-changing display Committee Member for Jessie Santiago (ECE) • Continuum Robotics graduated 2015 Committee Member for Jessica Merino (ECE) • Kinematics for ART's Continuum Robot Surface (NSF) graduated 2013 graduated 2012 Committee Member for Alper Mutlu (ECE) • Design of an Aquatic Continuum Robot Committee Member for Nivedhitha Giri (ECE) · Low-Resolution Vision for Mobile Robots graduated 2011 graduated 2010 Committee Member for Linnea Smolentzov (Psychology) • Evaluation of Assistive Robotics - Elderly graduated 2008 Committee Member for Martha Kwoka (ECE) • Motion Planning for AWE (NSF)

M. Arch. Design Thesis Supervision

1999-2007	Served as Thesis Committee Chair for 17 Theses
1999-2007	Serving as Committee Member for 21 Theses
2003-4 Award:	McClure Award for Best Clemson M.Arch. Thesis Project (Billy Zion)

Landscape Arch, Design Thesis Supervision and Committee

2012	Served as Committee member for Geoff Taylor (MLA) • Urban Design by Crowd Sourcing
2000	Serving as Committee Chair for Jamie Sittig (BLA) • "Third Avenue (Brooklyn) Competition"
Awards:	ASLA Certificate of Honor; Clemson University Honors Research Grant

B.S. Thesis Committees – Electrical & Computer Eng. and Materials Science & Eng.

- 2011-12 Everett Love - Materials Science & Engineering
- 2010-11 Michelle Buckley – Materials Science & Engineering
- 2009-10 Jessica Merino – Electrical & Computer Engineering
- 2009-10 Andrew Ries - Electrical & Computer Engineering
- 2008-9 William Lui – Materials Science & Engineering

EUREKA Research Supervisor for Funded Calhoun Honors Freshman Undergraduates

Summers 2006-14 In Electrical & Computer Engineering: Sam McKee, Maggie Boyd, Tyler Berkey, Zack Hewitt, Megan Milam, Mary Rutland, Dominic Leali In Digital Production Arts: Alyssa Simpson

January 2025

Clemson University | Teaching, Supervision, and Administration | 1999-2016

Teaching	
Ph.D. PDBE	 Advanced Theory (core class) Readings in Technologies, Materials & Fabrications Research Design
ECE/ARCH publication publication publication m.ARCH STUDIO award award award award award publication publication publication	 Architectural Robotics IEEE Robotics and Automation Magazine [RAS], 21(3) (September 2014): 143-150. Proceedings of ICRA 2010: the 2010 IEEE International Conference on Robotics and Automation. Proceedings of CHI 2010: the ACM Conference on Human Factors in Computing Systems. Proceedings of 2008 ACSA (Association of Collegiate Schools of Architecture) Conference. Thesis studio • Research Studio • Comprehensive Design Studio Honorable Mention, 2011-12 ACSA Steel Design Competition (Jingjie Zhao) These studios selected by AIA as among the "best practices in sustainable design education" McClure Award for best M.Arch. Thesis in 2003-4 (Billy Zion) St. Petersburg Prize for Excellence in Design (Lukas Kohl) 2008 ACSA Conference (Houston, TX) for my M.Arch. studio of Fall 2005. The 2011-12 ACSA Steel Design Competition Winners. 2005 ACSA Conference (Chicago, IL) for my M.Arch thesis studio of 2003-04
Jury comment	Green's] studio or presents some of the most compelling work submitted to the Ecological Literacy in Architectural Education program, demonstrating that design excellence measured by any standard need not be sacrificed to address ecology.
Editorial comment	The year-long, thesis option, headed by Keith Evan Greencomes as a surprise when you understand that Green is talking about environmental life, life systems, and biological life within the matrix of urban and suburban sprawl.[] Other university design laboratories need to follow Green's studio experiments in architectural thinking, analyzing, and extrapolating design from nature.

Academic Administration

2010-16	Director – The Clemson University Institute for Intelligent Materials, Systems & Environments A partnership of Architecture, Electrical & Computer Engineering, and Materials Science & Engineering University-level administrative appointment homepage: <u>www.CU-iMSE.org</u>
2012-16	Director – Digital Ecologies Certificate Program, Clemson University M.Arch, MS and PhD
2001-03	Director –International Design Program in Barcelona, Spain, Clemson University

Service to Clemson University and General Public (key activities)

2015	Member, 2020Forward – Clemson University Strategic Plan, Research Task Force
2015	Member, Committee Reviewing an Endowed Chair in ECE (appointed by Provost)
2015	Member, Industrial Design Task Force (new program feasibility), Clemson University
2003-4, 2014-15	Member, Architecture Faculty Search Committee, Clemson University
2010-16	Member, Clemson University Research Council Committee [URCC]
2004-10, 2011-16	Member, Advisory Committee, Ph.D. Program in Environmental Design & Planning
2009-16	Member (and Chair 2010-2013, 2015-16), Tenure & Promotions Committee, Architecture
2013-14	Chair, Committee Revising Bylaws & Faculty Assessment Standards, Architecture
2013	Member, College of AAH Peer Review (Tenure & Promotions) Committee for two Chair hires
2009-2012	Member, Clemson University Research Grant Committee [URGC]
2000-1, 2008-9	Chair, Architecture Faculty Search Committee
2008-9	Member, Chair Review Committee
2005-6	Member, Post-Tenure Review Committee, Clemson School of Architecture
2006-7	Member, School of Design and Building Advisory Council to the Dean
2005-7	Member, Curriculum Review Committee, College of Architecture, Arts & Humanities
2005-7	Chair, Curriculum Review Committee, Clemson School of Architecture
2001-03	Director, Clemson University's International Design Program in Barcelona, Spain

University of Auckland | Teaching and Supervision | 1994-1999

B.Arch. Thesis Supervision

1995 Serving as Chair for Martin King • "Making Architecture: A Matter of the Copy" award: The Cavalier Bremworth Prize (\$8000 Travel Grant)
 "The most theoretically adept of the award-winning projects."
 - Architecture New Zealand (January/February 1996) p. 70.

B.Arch. Teaching

B.ARCH STUDIO	 Design Studio Teaching (all year levels)
LECTURE CLASS	 An Introduction to Modern Architecture
	• Theories of Architecture • Arch. 131 (Lectures to 120 students)

Independent Course Supervision (selected)

1997	A Cabinet for a Magician / Guy Davies
award:	First Prize, The Bestwood Furniture Competition
1996	A Cabinet for a Calligrapher / Melinda Trask
a <i>ward:</i>	Jurors' Citation, The Bestwood Furniture Competition