Justin Miller, RA

Professor and Head

School of Architecture, Planning and Landscape Architecture Auburn University, $\ensuremath{\mathsf{AL}}$

EDUCATION	Master of Architecture Harvard University, Graduate School of Design, Cambridge, MA	
	Bachelor of Architecture College of Architecture, Design and Construction, Auburn University, Auburn, AL	
	Bachelor of Interior Design College of Architecture, Design and Construction, Auburn University, Auburn, AL	
EXPERIENCE	ACADEMIC	
2022 _ present	Head, School of Architecture, Planning and Landscape Architecture Auburn University	
2023_present	Professor of Architecture Auburn University	
2017 _ 2021	Chair, Program of Architecture Auburn University	
2013 _ 2023	Associate Professor of Architecture Auburn University	
2007 _ 2012	Assistant Professor of Architecture Auburn University	
2006	Adjunct Faculty, Program of Architecture Auburn University	
2001 _ 2004	AOP Graduate and Undergraduate Instructor Boston Architectural College	
	PRACTICE	
2007 _ present	MdO. Auburn, AL.	
_ 2007 _ 2012 2006 2001 _ 2004	Auburn University Assistant Professor of Architecture Auburn University Adjunct Faculty, Program of Architecture Auburn University AOP Graduate and Undergraduate Instructor Boston Architectural College PRACTICE	

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2004 _ 2007	SBCH Architects. Atlanta, GA.
2001 _ 2004	Leers Weinzapfel Associates. Boston, MA.
1999 _ 2001	VJA. Boston, MA.

REGISTRATIONS

2018 _ present	Registered Architect. State of Alabama, no. 8100
2005 _ present	LEED Accredited Professional. United States Green Building Council
2004 _ present	Registered Architect. Commonwealth of Massachusetts, no. 20284

HONORS

2024	Auburn University Author Award
	Auburn University Libraries
2022_2024	Member, Your Town Alabama Board of Directors.

2018	ACSA Annual Meeting. Paper Session Chair. Open Technology.
2017_2024	Member at Large, Alabama Association of Habitat for Humanity Affiliates Board of Directors.
2016	Auburn University Spirit of Sustainability Award
2016	Faculty of the Year for the College of Architecture Design and Construction
2016	Invited Speaker, Georgia Tech School of Architecture Symposia Fall
2016	21st Century Urban Housing Symposium: Ecology, Opportunity, Affordability. November 2016
2016_2018	Scientific Review Committee for the Facade Tectonics World Congress
2015_2018	Ann & Batey Gresham Professorship
2011	CADC, SoAPLA Outstanding Teaching Award
2009/2010	ACSA/AIA Housing Design Education Award

PUBLICATIONS BOOKS

- 2023 **"Designed for Habitat II: Collaborations with Habitat for Humanity."** Justin Miller and David Hinson. RoutledgePress, NY. Publication: 2023.
- 2012 **"Designed for Habitat: Collaborations with Habitat for Humanity."** Justin Miller and David Hinson. Routledge Press, NY. Publication: 2012.

PROFESSIONAL REPORTS AND PRESENTATIONS

- 2021 ADAPT web app. With colleagues Shu-Wen Tzeng and Wes Collins. ADAPT
- 2021 **ADAPT.** Published report documenting a United States Department of Housing and Urban Development (HUD) funded study on affordable solutions to aging in place. Report includes an overview of key findings, recommendations and design work generated by the research team including the ADAPT web app, housing design studies, and urban design studies. With colleagues Shu-Wen Tzeng and Wes Collins.
- 2021 **ADAPT.** Presentation of grant funded study on affordable solutions to aging in place to directors and staff of the United States Department of Housing and Urban Development (HUD). Presentation included an overview of key findings, recommendations and design work generated by the research team including the ADAPT web app, housing design studies, and urban design studies. With colleagues Shu-Wen Tzeng and Wes Collins.(summer 2021)
- 2018 **Cascade Parc: Urban Affordable Housing for Aging Populations.** Report provides the local Habitat for Humanity (HFH) affiliate and the state HFH support organization with designs and recommendations for housing designed to support aging in urban neighborhoods.
- 2016 The 20k and DESIGNhabitat Programs. Presented at the 21st Century Urban Housing Symposium: Ecology, Opportunity, Affordability. Georgia Institute of Technology School of Architecture Symposia, 11 November 2016.
- 2016 Accessible Alabama: Housing for Everyone. This report provided Accessible Alabama a white paper on the impact of the Accessible Alabama livability criteria on the design of a 'typical' affordable house design.
- 2016 *Green Home Alabama 2016 (GHA) Program Report.* This report documents the houses constructed as part of the GHA program and includes lessons learned from affiliates and projected energy consumption of each house.
- 2015 **DESIGNhabitat 4: approaching zero energy housing.** Publication produced for Alabama Habitat for Humanity affiliates. The document outlines best practices and most impactful strategies for achieving Energy star certification for habitat affiliates and documents a high performance prototype home built by the Escambia County Habitat for Humanity affiliate. Associated seminar co-taught with APLA colleague Robert Sproull.

2015	DESIGNhabitat 4: low impact development strategies. Publication produced for Alabama Habitat for Humanity affiliates. The document outlines best practices and most impactful strategies while planning to implement a low impact development (LID). The project provides design scenarios for the NorthWest HFH affiliate as case studies. Associated seminar co-taught with APLA colleague Robert Sproull.
2014	<i>Green Home Alabama (GHA) Program Report.</i> This report documents the houses constructed as part of the GHA program and includes lessons learned from affiliates and projected energy consumption of each house.
2013	<i>Sustainable Home Ownership Program Report.</i> This report documents the houses constructed as part of the GHA program and includes lessons learned from affiliates and projected energy consumption of each house. With APLA colleague David Hinson.
2011	<i>"Rebuilding Livable Communities."</i> Panelist and Presenter for the Rebuilding Livable Communities workshop, a session of The Strategies and Resources for Long-Term Recovery: A Federal Technical Assistance & Grant Writing Workshop. Tuscaloosa, AL December 2011. (<i>This workshop was an undertaking of the Appalachian Regional Development Initiative, an interagency effort focused on helping strengthen the regional economy in collaboration with the Alabama Department of Economic and Community Affairs (ADECA) and the EPA.) 2009 "DESIGNhabitat: prototypes for affordable sustainable homes." Presented at the 2009 Green Building Focus Conference, Birmingham, Alabama. Conference Proceedings.</i>
2009	<i>"DESIGNhabitat"</i> presentation to Lee County Habitat for Humanity affiliate Board of Directors. 2009 <i>"DESIGNhabitat"</i> presentation at Alabama Association of Habitat for Humanity Affiliates (AAHA) GREEN BLUE CONFERENCE
	REFEREED CONFERENCE PROCEEDINGS
2024	<i>"ADAPT: A Collaborative Approach to Accessible Affordable Housing."</i> Justin Miller Wesley Collins, Shuwen Tzeng. Abstract and paper accepted for presentation at the 2024 EAAE/ARCC International Conference. 23-26 May, 2024.
2024	<i>"Home Modification Design and Construction Strategies for Aging in Place: Contractor and Designer Implementation Perspectives."</i> Wesley Collings and Justin Miller. Paper Accepted at the 2024 Residential Building Design & Construction Conference. 27-28 March 2024. Penn State College of Engineering, Pennsylvania Housing Research Center. Presented by Wesley Collins
2019	"Design Practitioner's Insights Regarding the Use of Co-Location in Design-Build." Jeffrey Kim, Wesley Collins, J. Mark Taylor, Justin Miller, Jess Donnerberg. Paper accepted at ACS 2020. The 56th Annual Associated Schools of Construction International Conference. 15-18 April, 2020. Liverpool, UK. Presented by Jeffrey Kim.
2019	<i>"Co-Location During Design and Construction of Design-Build Projects: The General Contractor's Perspective."</i> Wesley Collins, Jeffrey Kim, J. Mark Taylor, Justin Miller, Jess Donnerberg. Paper accepted at ASCE Construction Research Congress 2020. Construction Research and Innovation to Transform Society. 8-10 March 2020. Tempe, Arizona. Presented by Wesley Collins.
2019	<i>"Insight Into Practitioners' Perceptions Regarding Co-Location And Its Impact On Project Value In Design Build."</i> J. Mark Taylor, Jeffrey Kim, Wesley Collins, Justin Miller, Jess Donnerberg. Paper accepted at The Sixteenth International Conference on Civil, Structural & Environmental Engineering Computing. 16-19 September, 2019. Riva del Garda, Lake Garda, Italy. Presented by J. Mark Taylor.
2014	<i>"Crafting material Effects."</i> Included in "What's the Matter, Materiality at the age of Computation" conference proceedings. International conference organized by the European Network of Heads of Schools of Architecture and the European Association for Architectural Education in collaboration with

	The School of Architecture of Valles UPV and hosted by the Chamber of Architects of Catalunya and The School of Architecture of Barcelona UPC. Barcelona, Spain.
2012	"Prefab for Humanity." Justin Miller (33%), Ryan Salvas (33%) and Robert Sproull (33%). Included in Offsite, Theory and Practice of Architectural Production conference proceedings of the 2012 Association of Collegiate Schools of Architecture (ACSA) Fall Conference. Philadelphia, PA. 2012 <i>"Airing Renovations: The Atmosphere of Paul Rudolph."</i> Justin Miller (50%) and Kevin Moore (50%). CHANGE, Architecture, Education, Practices, conference proceedings of the 2012 International Conference of the Association of Collegiate Schools of Architecture, Barcelona, Spain.
2011	<i>"Recalibrated: Approaching Integrated Design via Pedagogical Shifts."</i> Justin Miller (50%) and Christian Dagg (50%). Beginning of In The End, conference proceedings of the 2011 National Conference on the Beginning Design Student, Lincoln, NB
2011	<i>"Re-Envisioning: Analysis Tools in Beginning Design Studios."</i> Justin Miller. Beginning of / In The End, conference proceedings of the 2011 National Conference on the Beginning Design Student, Lincoln, NB.
2010	"DESIGNhabitat: Expanding the Design Build Model." Justin Miller (50%) and David Hinson (50%). Accepted for the 2010 ARCC/EAAE International Conference, "The Place of Research/The Research of Place."
2010	"Making Pedagogy." Justin Miller (50%) and Christian Dagg (50%). MADE: Design Education & the Art of Making, conference proceedings of the 2010 National Conference on the Beginning Design Student, Charlotte, NC.
2010	"DESIGNhabitat 3." Justin Miller. REbuilding, conference proceedings of the 2010 Annual Meeting of the Association of Collegiate Schools of Architecture, New Orleans, LA.
2009	<i>"RE_Assembling the Curriculum: Embedding Environmental Technologies in the Design Studio."</i> Justin Miller. Assembling Architecture, proceedings of the 2009 Building Technology Educators' Society National Conference, Albuquerque, NM.
2009	<i>"Assembling a Simple Decent Home: DESIGNhabitat 3.0."</i> Justin Miller. Assembling Architecture, proceedings of the 2009 Building Technology Educators' Society National Conference, Albuquerque, NM.
2009	"Small Differences that Matter: DESIGNhabitat 3.0 sustainable - affordable - homes." Accepted paper presentation for the 2009 Research Initiative for the Study of Diversity Conference "Understanding Differences That Matter." Auburn, Alabama.
GRANTS	
2021	"Designed for Habitat II." CADC Competitive Seed Grant. Pi: Justin Miller, Co-i: David Hinson. This grant supports editorial review of the manuscript for the forthcoming publication Designed for Habitat II. The book is under contract with Routledge Publishers and will be submitted to the publisher in October 2022. \$5,000, funded by the College of Architecture, Design and Construction (CADC).
2017	<i>Affordable, Accessible Housing Solutions for Aging in Place and People with Disabilities.</i> U.S. Department of Housing and Urban Development (HUD). Pi: Justin Miller, co-Pi's Shu-wen Tzeng and Wesley Collins. Team: Christine Fleming (Accessibility Policy), Eric Peebles(Accessibility Policy), X (Accessibility Policy), Jerrod Windham (Subject Matter Expert), David Hill (Subject Matter Expert), and Rusty Smith (Subject Matter Expert). This research project researched and designed affordable housing solutions that provide accessible housing options for people who desire to age in place and people with visual and mobility disabilities. <i>\$995,256, funded by HUD.</i>
2016	<i>SMART Solutions: Accessible Home Alabama.</i> co-Pi: Justin Miller, co-Pi: Christian Dagg. The Accessible Home Alabama project provided the Alabama Council on Developmental Disabilities a feasibility study on

making Habitat for Humanity houses accessible with Universal Design features. \$5,500 funded by Smart Home Solutions. Aug. - Oct. 2016.

- 2016 **"Revisiting the Sert and Gropius Residences."** CADC Competitive Seed Grant. Pi: Justin Miller. This project is the first phase of a multi-year research project that focuses on the environmental and aesthetic performance of the personal residences of significant architects of the 21st century. \$3,746, funded by the CADC.
- 2015 **AAHA Sustainable Home Ownership Program** (Year Three: Green Home Alabama. DESIGNhabitat 4.1_4.4). Pi: Justin Miller, co-PI: Christian Dagg, co-PI: David Hinson. In collaboration with Alabama Association of Habitat for Humanity Affiliates. The foundation providing financial backing for this grant will provided \$129,605 toward a total estimated project cost of \$897,588. SoAPLA faculty will be engaged in a Technical Assistance role with a contract of \$35,505 funded by the Oak Hill Fund.
- 2015 **DESIGNhabitat 5: Affordable Urban Housing Solutions for an Aging U.S. Population.** Pi: Justin Miller. This three-year project will provide critical seed funding that will enable the research and development of an affordable housing prototype for aging urban dwellers that can be replicated nationally. \$100,000, funded by the Jessie Ball DuPont Fund.
- 2014 **DESIGNhabitat 4.** Auburn University Competitive Outreach Scholarship Grant. CoPi Justin Miller, Co-Pi Robert Sproull. This grant supported prototype design documentation for the DESIGNhabitat 4 initiative, an effort funded by the Green Home Alabama Program (2014). The publication of the prototype designs and best practice details was distributed to all thirty state Habitat for Humanity Affiliates. \$20,000, funded by Auburn University Office of Outreach.
- 2013 **"Design of an Energy Modeling Protocol for Residential Construction.**" CADC Competitive Seed Grant. Pi: Justin Miller, Co-Pi: Robert Sproull, Co-Pi: Jacqueline Thompson. \$4,955, funded by the CADC.
- 2013 **AAHA Sustainable Home Ownership Program** (Year Two: Green Home Alabama. DESIGNhabitat 4). co-PI: Justin Miller, co-PI: Robert Sproull, co-PI: David Hinson. In collaboration with Alabama Association of Habitat for Humanity Affiliates, and Home Builders Association of Alabama. The Foundation providing financial backing for this grant will provided \$112,698 toward a total estimated project cost of \$921,000. January 2012 - January 2013. SoAPLA faculty will be engaged in a Technical Assistance role with a contract of \$19,483, funded by the Oak Hill Fund.
- 2012 **AAHA Sustainable Home Ownership Program.** co-PI: Justin Miller, co-PI: David Hinson. In collaboration with Alabama Association of Habitat for Humanity Affiliates, and Home Builders Association of Alabama. The Foundation providing financial backing for this grant will provided \$66,497 toward a total estimated project cost of \$921,000. January 2012 January 2013. SoAPLA faculty will be engaged in a Technical Assistance role with a contract of \$27,483 funded by the Oak Hill Fund.
- 2011 **"Radiant Assemblies for Low Income Housing."** CADC Competitive Seed Grant. Pi: Justin Miller, Co-Pi: Robert Sproull, Co-i: Ryan Salvas, Co-I's: Mark Dougherty and Oldarin Fasina, Bio Systems Engineering. \$10,000. grant funded by the CADC. M 06.2022 justin.miller@auburn.edu Page of 4 6

OUTREACH INITIATIVES

2016 Accessible Alabama Livable House

In collaboration with Accessible Alabama. This study focused on the range of modifications necessary to make a typical Habitat for Humanity house conform to Accessible Alabama Access for All guidelines. **Project Partners**: Smart Home Solutions. Kevin Braswell, Executive Director Funded by Accessible Alabama. \$5,500.

08.2017_08.2018 **DESIGNhabitat 5.0**

Affordable Urban Housing Solutions for an Aging U.S. Population. This three-year project will provide critical seed funding that will enable the research and development of an affordable housing prototype

for aging urban dwellers that can be replicated nationally. The Urban Studio and DESIGNhabitat Program faculty is partnering with the Birmingham Habitat for Humanity Affiliate to study approaches to urban multifamily housing solutions that address issues of aging, affordability, prefabrication, and reduced cost of ownership. The work will result in a scalable prototype, and documentation of best practices and design solutions and approaches developed over the course of the project.

Project Partners: Patricia Burch and Charles Moore; Birmingham Habitat for Humanity. Initiative supported by a \$100,000 grant from the Jessie Ball DuPont Fund.

08.2017_08.2018 **DESIGNhabitat 4.4**

As part of the Alabama Association of Habitat for Humanity Affiliates' 2015 Green Home Alabama Grant Program SoAPLA faculty, Justin Miller and Christian Dagg directed the design of a high performance building designs aimed at near net zero energy performance. The project was constructed in Opelika, Alabama.

Project Partners: Mark Grantham, Executive Director Auburn Opelika Habitat for Humanity; Brandon Dixon, Executive Director Alabama Association of Habitat for Humanity (AAHA); Andy Bell, Energy Rater, Energy Vanguard. Grant funded support \$30,000.

08.2015_08.2018 **DESIGNhabitat 4.3**

As part of the Alabama Association of Habitat for Humanity Affiliates' 2015 Green Home Alabama Grant Program SoAPLA faculty, Justin Miller and Robert Sproull directed the design of a Habitat for Humanity training house aimed at near net zero energy performance in Gu-Win, Alabama.

Project Partners: Teresa Clark, Executive Director, Habitat for Humanity of Northwest Alabama (HFHNA); Greg Yates, Construction Manager (HFHNA); Brandon Dixon, Executive Director Alabama Association of Habitat for Humanity (AAHA); Andy Bell, Energy Rater, Energy Vanguard. Grant funded support \$30,000.

08.2015_08.2018 **DESIGNhabitat 4.2**

As part of the Alabama Association of Habitat for Humanity Affiliates' 2015 Green Home Alabama Grant Program SoAPLA faculty, Justin Miller and Robert Sproull directed the design of of a near net zero house sited in Athens, Alabama.

Project Partners: Greg Miller, Executive Director Athens-Limestone County Habitat for Humanity; Brandon Dixon, Executive Director Alabama Association of Habitat for Humanity (AAHA); Andy Bell, Energy Rater, Energy Vanguard. Grant funded support \$30,000.

08.2015_08.2018 DESIGNhabitat 4.1

As part of the Alabama Association of Habitat for Humanity Affiliates' 2015 Green Home Alabama Grant Program SoAPLA faculty, Justin Miller and Robert Sproull directed the design of a near net zero house sited in Flomaton, Alabama.

Project Partners: Alecia Glaize, Executive Director Escambia County Habitat for Humanity (ECHFH); Ron Zundell, Construction Coordinator, ECHFH; Brandon Dixon, Executive Director Alabama Association of Habitat for Humanity (AAHA); Andy Bell, Energy Rater, Energy Vanguard. Grant funded support \$30,000.

2013 DESIGNhabitat 4.0

As part of the Alabama Association of Habitat for Humanity Affiliates' 2013 Green Home Alabama Grant Program Architecture program faculty, Justin Miller and Robert Sproull directed the design of three highperformance building designs aimed at near net zero energy performance.

Project Partners: Brandon Dixon, Executive Director Alabama Association of Habitat for Humanity (AAHA); Andy Bell, Energy Rater, Energy Vanguard; Escambia County Habitat for Humanity; Habitat for Humanity of Northwest Alabama; Athens-Limestone Habitat for Humanity. Documentation of the initiative was supported by a \$20,000 Auburn University Competitive Outreach Scholarship Grant.

03.2012_08.2014 DESIGNhabitat 3.6

At the request of the Alabama Association of Habitat for Humanity Affiliates and the Lee County Habitat for Humanity Affiliate Executive Director a DESIGNhabitat prototype house was selected from the DESIGNhabitat plan book (developed in support of the 2012-13 AAHA Sustainable Home Ownership Program Grant) and modified to fit unique site and family conditions. This included the redrafting of a set of drawings of the house. Auburn's Master of Integrated Design and Construction developed designs for a large exterior living room.

Project Partners: Mark Grantham, Executive Director LCHFH. Affiliate funded \$60,000.

03.2012_10.2012 DESIGNhabitat 3.5

Coordinated the revision of prototype house drawings for Escambia County Habitat for Humanity (HCHFH). The house (located in Atmore, AL) is a 2 bedroom, 930 sf home built to replace the owner's dilapidated existing house. The prototype was selected due to its emphasis on cooling strategies (primarily cross ventilation and day/night porches) that proved successful in the first version of this house (3.1) and was modified to include a FEMA approved Safe Room.

Project Partners: Alecia Glaize, Executive Director ECHFH, Ron Zundell, Construction Coordinator, ECHFH. Affiliate funded \$55,000.

02.2012_08.2012 DESIGNhabitat 3.4

Coordinated the revision of prototype house drawings for Escambia County Habitat for Humanity (HCHFH). The house was one of 16 homes constructed during the 2012-13 AAHA Sustainable Home Ownership Program Grant. In addition to earning Energy Star certification, the house was built to Fortified Gold wind resistance certification.

Project Partners: Alecia Glaize, Executive Director ECHFH, Rusty Miller, Chair, Construction Committee, ECHFH, Andy Bell, Sustainable Building Specialist, AAHA, Page Ledbetter, Sustainable Building Specialist, AAHA Affiliate funded: \$62,000. Grant funded: \$3,000.

08.2011_01.2012 **DESIGNhabitat 3.3**

At the request of the Alabama Association of Habitat for Humanity Affiliates and the Escambia County Habitat for Humanity Affiliate Executive Director a DESIGNhabitat 3 prototype house was revised to include a FEMA Safe Room. This included the redrafting of a set of drawings of the house for the Escambia County Affiliate. The house (located in Atmore, AL) is a 3 bedroom, 1135 sf house. The prototype was selected due to its emphasis on prefabricated construction assemblies (the affiliate has adopted this approach following their construction of the DESIGNhabitat 3.1 house).

Project Partners: Alecia Glaize, Executive Director ECHFH, Rusty Miller, Chair, Construction Committee, ECHFH. Affiliate funded \$62,000.

02.2011_10.2011 **DESIGNhabitat 3.2**

Coordinated the revision of prototype house drawings for Hale County Habitat for Humanity (HCHFH). The house (located in Greensboro, AL) is a 2 bedroom, 930 sf home built to replace the owner's dilapidated existing house. The prototype was selected due to its emphasis on cooling strategies (primarily cross ventilation and day/night porches) that appealed to the homeowner.

Project Partners: Pam Door, Executive Director HCHFH. Affiliate funded \$55,000.

02.2010_08.2011 DESIGNhabitat 3.1

Coordinated the revision of a DESIGNhabitat 3.0 prototype design to meet the program brief of the Habitat homeowner and goals of the Habitat Affiliate (Escambia County Habitat for Humanity). The house, located in Atmore, AL, is a 2 bedroom one bathroom, 900 square foot home. The prototype was selected due to its emphasis on energy conservation strategies as well as the design's use of prefabrication methods (prefabricated wall panels and roof trusses), which the affiliate had not attempted on prior building efforts.

Project Partners: Alecia Glaize, Executive Director ECHFH, Rusty Miller, Chair, Construction Committee, ECHFH. Affiliate funded \$56,000.

12.2008_05.2009 **DESIGNhabitat 3.0**

In collaboration with the Alabama Association of Habitat for Humanity Affiliates a studio was developed to design a set of prototype house plans that would meet several energy rating benchmarks as well as investigating the viability of prefabrication in the construction of Habitat of humanity houses. **Project Partners**: Karen McCauley, Executive Director AAHA, Alexander Bell, Green Building Specialist, AAHA.