
Christoph F. Reinhart
PROFESSOR



Massachusetts Institute of Technology

77 MASSACHUSETTS AVE,
RM 5-418, CAMBRIDGE,
MA 02139, USA

• TEL. (617) 253-7714
FAX. (617) 253-6152
• creinhart@mit.edu

• www.mit.edu/SustainableDesignLab
• www.solemma.com
• <https://buildingtechnologypress.com>

EDUCATION

- 2001 **Dr. Ing.** Architecture, Technical University of Karlsruhe, Germany
Dissertation: *Daylight Availability and Manual Lighting Control in Office Buildings*
- 1997 **Dipl.-Phys.**, Albert-Ludwigs Universität, Freiburg, Germany
M.Sc. Physics, Simon Fraser University, Vancouver, Canada

ACADEMIC POSITIONS HELD

- since 2024 **Climate Project at MIT – Mission Director for Resilient and Prosperous Cities**
Massachusetts Institute of Technology
- since 2022 **Inaugural Alan and Terri Spoon Chair of Architecture and Climate**
Massachusetts Institute of Technology, Department of Architecture
- since 2017 **Professor in Building Technology**
Massachusetts Institute of Technology, Department of Architecture
- 2017 – 2024 **Director Building Technology Program**
Massachusetts Institute of Technology, Department of Architecture
- 2012 – 2017 **Associate Professor in Building Technology (with tenure)**
Massachusetts Institute of Technology, Department of Architecture
- 2008 – 2011 **Associate Professor of Architectural Technology**
Harvard University, Graduate School of Design
- 2005 – 2007 **Adjunct Professor**
McGill University, School of Architecture
- 2001 – 2008 **Research Officer (staff scientist)**
National Research Council Canada

NON ACADEMIC POSITIONS

- Since 2012 **Solemma LLC – Managing Member**
Harvard spinoff: Developers and distributors of the ClimateStudio, ALFA and (until 2020) DIVA-for-Rhino environmental performance analysis tool suites (www.solemma.com)
- 2013 – 2021 **mapdwell LLC – Founding Partner and Strategic Development Advisor**
MIT spinoff: Developer and distributor of urban solar mapping tools; mapdwell was merged into Palmetto Clean Technology in 2021 (www.mapdwell.com)

RESEARCH PROJECTS

Since 2025	Massachusetts Building Sector Model, Policy Analysis and Electric Grid Impact, PI <i>MA Executive Office of Energy and Environmental Affairs, \$150,000 over 1 yr</i>
Since 2024	Building Investment Roadmap for Energy and Climate Resilience, PI <i>MIT Lincoln Laboratory, \$200,000 over 2 yr</i>
Since 2024	An Equitable, Affordable Resilient Nationwide Energy System Transition (EARNEST), Co-PI <i>US Department of Energy, \$264,000 over 3 yr</i>
Since 2019	MIT Portugal Program Faculty Lead <i>MIT Portugal Program Seed Grant; \$450,000 over 5 yr</i>
2023 – 2024	Energy, Equity and Design for Mexico City’s Neighborhoods, Co-PI with R Segal <i>Norman B. Leventhal Center for Advanced Urbanism; \$75,000 over 1 yr</i>
2022 – 2024	Development of a Building Retrofit Adoption Model, PI <i>MIT Energy Initiative Future Low Carbon Center; \$225,000 over 2 yr</i>
2022 – 2024	Synthetic electricity and gas load profiles for buildings, PI <i>Department of Defense with MIT Lincoln Laboratories; \$250,000 over 2 yr</i>
2020 – 2023	C-Tech CLIMATE DRIVEN TECHNOLOGIES FOR LOW CARBON CITIES, PI <i>MIT Portugal Program; \$900,000 over 3 yr</i>
2020 – 2022	Towards Zero-Emissions Neighborhoods: A Novel Building-Grid Optimization Framework, Co-PI with Audun Botterud <i>MIT Energy Initiative; \$150,000 over 2 yr</i>
2019 – 2021	FOOD FOR THOUGHT, PI <i>Center for Complex Engineering Systems (CCES) at KACST and MIT; \$330,000 over 2 yr</i>
2019 – 2021	DEVELOPMENT OF A CO2 BUILDING PORTFOLIO MANAGER, PI <i>Shell Germany; \$120,000 over 1 yr</i>
2018 – 2020	URBAN FOOD ANALYSIS, PI <i>Arup Global Research Challenge; \$58,000 over 2 yr</i>
2017 – 2020	ENERGY BAZAR, PI <i>Exelon Corporation; \$400,000 over 3 years</i>
2017 – 2019	DECARBONIZED ENERGY SYSTEMS FOR NEW VOLPE CENTER, Co-PI <i>MIT Environmental Solutions Initiative; Seed grant over \$150,000 over 2 years; Co-PI with Prof Les Norford (MIT Architecture) and David Hsu (MIT Urban Planning)</i>
2016 – 2019	STRATEGIC RESEARCH, PI <i>Behnisch Architekten; \$105,000 over 3 years</i>
2017 – 2019	WATER ENERGY FOOD, PI <i>Center for Complex Engineering Systems (CCES) at KACST and MIT; \$330,000 over 2 yr</i>
2017 – 2018	URBAN PERSONAS, PI <i>Philips Lighting; \$125,000 over 1 year</i>
2014 – 2018	SUSCITY: URBAN DATA DRIVEN MODELS FOR CREATIVE AND RESOURCEFUL URBAN TRANSITIONS, CO-PI <i>MIT Portugal Program \$395,000 over 4 years; Co-PI with Prof John Fernandez, Leon Glicksman, Marta Gonzales, Kent Larson and Richard de Neufville</i>
Since 2002	DAYSIM, PI <i>Main developer of the daylighting design tool DAYSIM. (www.daysim.com); PI</i>
2015 – 2017	RIYADH ENERGY STUDY, Co-PI <i>Center for Complex Engineering Systems (CCES) at KACST and MIT; \$450,000 over 2 years; Co-PI with Prof Marta Gonzales (MIT CEE)</i>

- 2014 – 2017 MIT – MASDAR INSTITUTE SIGNATURE PROJECT: LINKING SENSOR NETWORKS TO URBAN ENERGY MODELS, Co-PI
Masdar Institute \$1,800,000 over 3 years; Co-PIs with Prof Les Norford and Steven Leeb (MIT EE)
- 2013 – 2016 KUWAIT SIGNATURE PROJECT - ENHANCED OPERATIONAL ENERGY EFFICIENCY AND LIFE CYCLE PERFORMANCE OF BUILDINGS AND NEIGHBORHOODS IN KUWAIT, Co-PI
Government of Kuwait \$3,700,000 over 3 yr for MIT; The project involve faculty in several MIT Department and is led by Prof Oral Buyukozturk (MIT Civil Engineering)
- 2014 – 2016 BOSTON ENRGY MODEL, PI
Massachusetts Clean Energy Center and the Boston Redevelopment Authority, \$75,000 over 1 yr; Development of a city-wide energy model for the City of Boston, PI
- 2013 – 2015 MIT-KACST - CITYSCHEMA, Co-PI
Center for Complex Engineering Systems (CCES) at KACST and MIT; \$450,000 over 2 yrs; Co-PI with Kent Larson (MIT Media Lab)
- 2012 – 2014 MIT ENERGY INITIATIVE SEED GRANT – URBAN MODELING INITIATIVE, PI
MITEI and United Technology Corporation \$150,000 over 2 years; Co-PI with Prof Les Norford
- 2010 – 2014 EFRI-SEED: CREATING OPPORTUNITIES FOR ADAPTATION BASED ON PULSE (POPULATION IN URBAN LANDSCAPE FOR SUSTAINABLE BUILT ENVIRONMENT), Co-PI
National Science Foundation \$2,000,000 over 4 year; Co-PI with Prof Jelena Srebric (Penn State) and Prof Jack Spengler (Harvard School of Public Health).
- 2012 US DOE – GPIC HUB- DEVELOPMENT OF A DAYSIM API, PI
US-DOE and GPIC \$75,000 over 1 year; PI
- 2010 – 2011 DEVELOPMENT OF A CERMAIC SHADING SYSTEM, Co-PI
ASCER (Tiles of Spain) \$100,000 over 1 yr; Co-PI with Prof Martin Bechthold (Harvard GSD)
- 2009 – 2011 THE USE OF BUILDING ENERGY SIMULATIONS DURING DESIGN, CONSTRUCTION AND OPERATION – AN OWNER’S PERSPECTIVE, PI
Development of Energy Modeling Guidelines for Harvard University; collaboration with the Harvard Office for Sustainability. Harvard Real Estate Academic Initiative \$37,000 over 2 yr; PI
- 2009 – 2010 VISUAL COMFORT IN OPEN PLAN ENVIRONMENTS, PI
Dean’s Annual Research Grant Program \$27,000 over 1 yr; PI
- 2009 – 2010 THE DAYLIGHTING DASHBOARD, PI
Daylight research funded by Autodesk; \$20,000 over 1 yr; PI
- 2009 – 2010 A RULE-OF-THUMB BASED DESIGN SEQUENCE FOR DAYLIGHTING, PI
William F Milton Fund. \$35,000 over 1 yr; PI
- 2008 – 2010 SUSTAINABLE DESIGN TUTORIALS
Development of teaching material for sustainable design. Office of the President \$18,000 over 3 yr; PI
- 2007 – 2009 DEVELOPMENT OF A VALIDATION METHODOLOGY FOR DAYLIGHT SIMULATION ENGINES
Development of test cases for software validation and compliance purposes. Autodesk \$100,000; PI
- 2007 – 2008 PIER PROGRAM - DAYLIGHTING METRICS PROJECT
Analysis of 61 daylit spaces. California Energy Commission and the New York State Energy Research and Development Authority \$1,800,000; Co-PI: Lisa Heschong and Prof Joel Loveland
- 2004 – 2008 OPTIMIZING OVERALL ENERGY USE AND OCCUPANT COMFORT IN THE PERIMETER ZONE
Field studies to monitor occupant use of lighting and shading controls in commercial buildings. Natural Resources Canada and BC Hydro; \$800,00 over 4 years; PI
- 2004 – 2008 DEVELOPMENT OF A DAYLIGHTING DESIGN GUIDE
Canadian Technology & Innovation Initiative \$290,000 over 4 yr; PI

2005 – 2006	DYNAMIC DAYLIGHT PERFORMANCE METRICS <i>Development of climate-based daylighting performance metrics. Kalwall \$30,000 over 2 yr; PI</i>
2003 – 2005	MODELING CLASSROOMS IN LIGHTSWITCH WIZARD <i>BC Hydro and the Canadian Technology & Innovation Initiative \$60,000 over 3 yr; PI</i>
2004 – 2005	DAYLIGHT SIMULATIONS OF A TRANSLUCENT GLAZING SYSTEM <i>Development of a Radiance model for a translucent panel. Kalwall \$60,000 over 1 yr; PI</i>
2003 – 2005	TRANSLUCENT GLAZING SYSTEMS FOR DAYLIGHTING <i>Laboratory study on health and task performance in daylight spaces. Kalwall \$150,000 over 2 yr; Co-PI with Dr. Jennifer Veitch (National Research Council Canada)</i>
2001- 2004	DAYLIGHTING CREDITS FOR CODES <i>Evaluation of daylighting technologies. Natural Resources Canada \$150,000 over 3 yr; PI</i>
2002 - 2003	NEW NRC DAYLIGHTING LAB <i>Setup of NRC's daylighting laboratory (two identical south-facing test offices that are equipped with extensive monitoring equipment). National Research Council \$100,000 over 1 yr; PI</i>
2003	LIGHTSWITCH WIZARD, PI <i>Development of an online daylighting tool. Natural Resources Canada \$70,000 over 1 yr; PI</i>

AWARDS AND SCHOLARSHIPS

2018	Fraunhofer Bessel Prize by the Alexander von Humboldt Foundation
2017	Best Paper Award 2017 Building and Environment Journal (with N L Jones)
2017	Commended Paper Award Passive Low Energy Architecture (PLEA) 2017 in Edinburgh (with I Turan, J E Fernández, P Ferrão and E Olivetti)
2016	IBPSA-USA Award for Distinguished Achievement in Building Simulation
2016	Georgios Kazas Best Paper Award 8 th International Conference on Sustainability in Energy and Buildings, SEB-16 (with C S Monteiro, A Pinaa, C Cerezo Davila and P Ferrão)
2015	SUSTAINIA 10 2015: winner of the IT category (with mapdwell LLC)
2014	FastCompany Design by Innovation Award 2014: category Data Visualization for mapdwell Solar Systems (with mapdwell LLC)
2013	Star of Building Science, Inaugural Virtual Academy of Excellence, Buildings4Change magazine
2011	Best Paper Award Symposium on Simulation for Architecture and Urban Design (with J Niemasz and J Sargent)
2010	Leon Gaster Award for the Best Lighting Application Paper of the Year, awarded by the CIBSE Society of Light and <i>Lighting (with V LoVerso)</i>
2009	Faculty of the Year, Harvard Graduate School of Design, Architecture
2009	ARUP Prize - Best paper on the Application of Building Performance Simulation in the Design Process (with H Wasilowski)
2005	Lorne W. Gold Award for the best IRC publication of the year
2005	NRC Industrial Partnership Award (with COPE team)
2004	IRC Public Awareness Award (with A Laouadi)
2004	IRC Industrial Partnership Award (with COPE team)
1998 - 2001	Deutsche Forschungs Gemeinschaft (DFG)doctoral scholarship
1994	DAAD scholarship (German Academic Exchange Service)

1993 **Erasmus Scholarship (European Union)** (to study for a year in Paris)

TEACHING EXPERIENCE

Since 2012 **Massachusetts Institute of Technology**
4.4s46 *Food for Thought* (2019)
4.401./4.464 *Environmental Technologies in Buildings* (2012 – 2021)
4.430 *Daylighting & Solar Gain Control – High Performance Facades* (2012, 2014, 2019)
4.433 *Modeling Urban Energy Flows – Towards Sustainable Cities and Neighborhoods* (2013, 2015, 2016, 2017, 2020, 2022)
4.481 *Building Technology Seminar* (since 2012)
4.4s42 *Comfort in Motion* (2015)

2008 – 2011 **Harvard University, Graduate School of Design**
GSD 6112.m2 *Energy Technology and Buildings*
GSD 6205 *Environmental Technologies in Buildings*
GSD 6332 *Daylighting Buildings*
GSD 6417 *Building Performance Simulation – Energy*
GSD 6420 *Thermal Analysis of Buildings*
HBS Harvard Advanced Management Development Program - *Sustainable Building Design*

2005 – 2007 **McGill University, School of Architecture**
ARCH 447 *Lighting* (with C. Sampson)
ARCH 676 *Building Simulation*

ACADEMIC PROFESSIONAL AND PUBLIC SERVICE

Ongoing **Member of the Editorial Board**
Building and Environment (since 2020)
Building Simulation – An International Journal (since 2008)
Building Research and Information (2018 – 2020)
Journal of Building Performance Simulation (2008 – 2017)

External Reviewer for the following journals
Nature Energy, *ASHRAE Journal*, *Energy & Buildings*, *Building and Environment*, *Building Research & Information*, *Journal of Building Performance Simulation*, *Building Simulation – An International Journal*, *Solar Energy*, *LEUKOS*, *Lighting Research & Technology*

2006 – 2017 **Member of the IESNA and CIE Daylighting Committees**

2013 **Organizer of the Symposium on Sustainable Urban Design at MIT**

2011 – 2013 **IBPSA-USA Board of Directors**

2010 **Expert Witness: National Academy of Sciences Institute of Medicine**

2005, 2009 **Organizer of the International Radiance Workshop**

2008 **Scientific Chair for esim 2008**

2006 – 2008 **IBPSA-Canada Board of Directors**

2005 – 2007 **Member of the Technical Advisory Group for LEED-Canada**

2006 **Guest Editor *Energy & Buildings Journal*** (with S Selkowitz, LBNL)
Special issue on “Daylighting”, Energy & Buildings 38:7, 2006.

2002 – 2005 **Subtask Leader, IEA Task 31 *Daylighting Buildings in the 21st Century***

POSTDOC AND STUDENTS

POSTDOCS AND RESEARCH SCIENTISTS SUPERVISED

Name	Program	Time Period
Sam Letellier-Duchesne	Postdoc	Jan 2020 – Jul 2021
Khadija Benis	Research Scientist	Jan 2018 – Jul 2021
Carlos Cerezo	Research Scientist	Oct 2017 – Jul 2018
Jay Dhariwal	Postdoc	Jan 2016 – Jul 2017
Cody Rose	Research Scientist	Jul 2015 – Jun 2016
Valerio LoVerso	NSERC Postdoctoral Fellow	Aug 2006 – Jul 2007
Denis Bourgeois	NSERC Postdoctoral Fellow	Jun 2005 – Dec 2006

GRADUATE STUDENTS (CO-) SUPERVISED

Student	Degree Program	Graduated
Zach Berzolla	PhD Building Technology, MIT	2024
Yu Qian Ang	PhD Building Technology, MIT	2022
Alpha Arsano	PhD Building Technology, MIT	2022
Irmak Turan	PhD Building Technology, MIT	2020
Shreshth Nagpal	PhD Building Technology, MIT	2019
Nathaniel Jones	PhD Building Technology, MIT	2017
Carlos Cerezo	PhD Building Technology, MIT	2017
Nan Zhao	PhD MIT Media Lab (co-advise J Paradiso)	2017
Timur Dogan	PhD Building Technology, MIT	2015
Tarek Rakha	PhD Building Technology, MIT	2015
Matt Aldrich	PhD MIT Media Lab (co-advise J Paradiso)	2014
J. Alstan Jakubiec	PhD Building Technology, MIT	2014
Diego Ibarra	Doctor in Design Studies, Harvard	2014
Memo Cedeno	Harvard School of Public Health (co-advise J Spengler)	2014
Holly W Samuelson	Doctor in Design Studies, Harvard	2013
Huang Jianxiang	Doctor in Design Studies, Harvard (co-advise S Pollalis)	2013
Sam Wolk	SMBT	2024
Zoe Le Hong	SMBT	2024
Svenja Herb	SMBT	2024
Amanda Kirkeby	SMBT	2024
Zoe De Simone	SMArchS BT	2024
Tristan Searight	MArch	2023
Leilah Sory	SMBT (co-advise C Mueller)	2023
Elizabeth Young	SMBT	2021
Mariana Liebman-Pelaez	SMBT	2020
Jiamin Sun	SMArchS BT	2018
Jamie Farrell	SMArchS	2017
Bradley Tran	SMBT	2017
Alpha Arsano	SMArchS	2017
Norhan Bayomi	SMArchS (co-advise J Fernandez)	2017
Jamie Bemis	Master in City Planning, MIT	2016
Irmak Turan	SMArchS (co-advise J Fernandez)	2016
Cody Rose	SMBT	2015
Manos Saratsis	SMArchS	2015
Jeff Geisinger	SMArchS	2015

Chris Mackey	MArch I/SMBT, MIT (co-advise S Tibbits)	2015
Trygve Vasted	MArch, MIT (co-advise J Lamere)	2015
Carlos Cerezo	Master in Design Studies, Harvard	2013
Krista Palen	Master in Design Studies, Harvard	2013
Amanda Webb	SMARCHS, MIT (Fernandez)	2012
Timur Dogan	Master in Design Studies, Harvard	2012
Debashree Pal	Master in Design Studies, Harvard	2012
Elliot Glassman	Master in Design Studies, Harvard	2012
Jeff Niemasz	Master in Design Studies, Harvard	2011
Jon Sargent	Master in Design Studies, Harvard	2011
Seth Holmes	Master in Design Studies, Harvard	2011
Azadeh Omidfar	Master in Design Studies, Harvard	2011
Rashida Mogri	Master in Design Studies, Harvard	2011
Eduardo Berlin	Master in Design Studies, Harvard	2011
Andrea Dorotan	Master in Design Studies, Harvard	2011
Rohit Manudhane	Master in Design Studies, Harvard	2010
Tiffany Otis	Master in Design Studies, Harvard	2010
Diego Ibarra	Master in Design Studies, Harvard	2009
Holly Wasilowski	Master in Design Studies, Harvard	2009
Jennifer Sze	Master in Design Studies, Harvard	2009
Cynthia Kwok	Master in Design Studies, Harvard	2009

EXTERNAL EXAMINER/READER

Student	Degree Program	Defense Date
Jiayu Pan	University of Cambridge	2024
Valeria Picconi	ETH Zurich	2024
Ata Chokhachian	Technical University of Munich	2022
Daniele Santucci	Technical University of Munich	2021
Niloufar Emami	PhD, University of Michigan	2018
Khadija Benis	Instituto Superior Técnico Lisbon	2018
Claudia Sousa Monteiro	Instituto Superior Técnico Lisbon	2018
Nelson Soares	PhD, Universidade de Coimbra	2015
Frederic Haldi	PhD, Ecole Polytechnique Fédérale de Lausanne	2009
Sian Kleindienst	PhD, Massachusetts Institute of Technology	2009
Denis Bourgeois	PhD, Université de Laval	2005

PRESENTATIONS

KEYNOTE LECTURES

Aug 24	<i>Int. Association of Building Physics (IBPC) 2024</i> , Toronto, Canada
May 24	<i>KPF TECH Week 2024</i> , New York City
Mar 24	<i>Int. Conference on Refrigeration and Air Conditioning (NCRAC)</i> , Chennai, India
Jun 23	<i>Record on the Road - Boston</i> , with Matt Noblett, organized by Architectural Record
Oct 22	<i>Annual Conference of the Daylight Academy</i> , Zurich, Switzerland
Jun 22	<i>European Façade Network Conference</i> , Lisbon, Portugal
Oct 21	<i>ITECON CEES 2021</i> , Coimbra, Portugal
Sep 19	<i>Building Simulation 2019</i> , Rome, Italy
Sep 18	<i>IBPSA Regional Conference - South America</i> , Santiago, Chile
Sep 17	<i>National Conference on Comfort in the Built Environment (ENCAC) 2017</i> , Brazil
Sep 16	<i>Urban Transitions</i> , Shanghai
Jul 16	<i>BauChina 2016</i> , Beijing
May 16	<i>esim 2016</i> , McMaster University, Canada
Oct 14	<i>Syracuse Center of Excellence, Annual Symposium</i> , Syracuse, NY, USA
Mar 14	<i>Urban Integration 2014</i> , Sheffield Hallam University, Sheffield, UK
Aug 12	<i>SimBuild 2012</i> , University of Wisconsin, Madison, USA
May 12	<i>esim 2012</i> , Dalhousie University, Halifax, Canada
Apr 11	<i>Simulation for Architecture and Urban Design</i> , Boston, USA,
Nov 09	<i>1st Swiss Building and Urban Simulation Conference</i> , organized by IBPSA-CH, CH
Oct 09	<i>2nd Symposium on Sustainable Healthy Buildings</i> , Seoul, South Korea
Aug 07	<i>IX National Meeting on Environmental Comfort in Buildings</i> , Ouro Preto, Brazil
May 06	<i>esim 2006</i> , University of Toronto, Toronto, Canada

INVITED PRESENTATIONS AND LECTURES

Apr 25	<u>Department Seminar</u> Northwestern University, IL
Apr 25	<u>Distinguished Speaker Series</u> University of Illinois Chicago, IL
Mar 25	<u>Seminar on Critical Cooling</u> Harvard Law School, MA
Jan 25	<u>Urban Redevelopment Authority</u> Singapore
Jan 25	<u>College of Design and Engineering</u> National University of Singapore
Jan 25	<u>Int. Workshop</u> PolyU Academy for Interdisciplinary Research (PAIR), Hongkong
Oct 24	<u>Seminar on Cooling as a Human Right</u> Harvard Law School, MA
Jan 24	<u>Center for the Built Environment</u> UC Berkeley, CA
Dec 23	<u>ESTCP Symposium Decarbonization Technical Session</u> , Washington, DC
Nov 23	<u>School of Architecture at Universidad Politécnica de Madrid</u> , Spain
Oct 23	<u>Clean-IT Conference 2023</u> , Hass Plattner Institute, Potsdam, Germany

May 23	<u>Center for Energy and Environmental Policy Research (CEEPR)</u> , Cambridge, MA
Mar 23	<u>MIT China Innovation and Entrepreneurship Forum</u> , Cambridge, MA
Feb 23	<u>Normal Foster Foundation Energy workshop</u> Madrid, Spain
Jan 22	<u>DOE Solid State Lighting workshop</u> Lighting Application Efficiency
Oct 21	<u>XLIII (43rd) MIT Global Change Forum</u> Urban Transition Session
Oct 21	<u>Misui Mission</u> Invited research Presentation
Oct 21	<u>University of California Berkeley</u> Virtual Window View Quality Symposium
Sep 21	<u>DOE Lighting R&D Program</u> LED Advanced Luminaires and Manufacturing
May 21	<u>Bauhaus of the Seas</u> Roundtable, Circular Economy for Coastal Regions, Lisbon
May 21	<u>The Architect's Newspaper Tech+ Panel</u> Future of Simulation in Design
May 21	<u>University of Oregon</u> Invited lecture on Daylighting
May 21	<u>Climate Information for Adaptation Workshop</u> Caltech Climate Modeling Alliance
Apr 21	<u>MIT Center for Energy and Environmental Policy Research</u> Decarbonizing Heating
Mar 21	<u>KPF Tech week</u> Enabling a net-zero global building stock, NYC
Feb 21	<u>MIT Industrial Liaison Program</u> Energy Talks, Decarbonizing Building
Feb 21	<u>MIT Alumni Energy Environment & Sustainability Network</u>
Jan 21	<u>Florida Atlantic University</u> spring lecture series: Technology in Architecture
Dec 20	<u>YPO@MIT</u> program: Technology + Innovation: real estate in a time of change
Jul 20	C. R.E Retrofitting buildings, <u>MIT Center for Real Estate Annual Conference</u>
Oct 20	<u>MIT Global Change Forum</u>
Nov 19	ConCave Talks, <u>Georgia Tech</u> , Atlanta
Nov 19	Panel Presentation, <u>GreenBuild</u> , Atlanta
Nov 19	Panel Presentation, <u>MIT Energy Initiative Annual Conference</u>
Oct 19	Public Lecture, <u>ETH Zürich ITA</u> , Zürich, Switzerland
Oct 19	International Daylighting Symposium, <u>VELUX Foundation</u> , Paris
Sep 19	Annual Research Conference, <u>MIT Portugal Program</u> , The Azores
May 19	Building for the Future Panel, <u>MIT Center for Real Estate Annual Conference</u>
Mar 19	Panel Presentation, <u>CERA Week</u> , Houston
Dec 18	Archizoom Lecture Series, <u>Ecole Polytechnique Federale de Lausanne</u> , Switzerland
Nov 18	Panel Presentation, <u>GreenBuild</u> , Chicago
Oct 18	Solemnia Symposium, <u>Cornell University</u> , New York City
Apr 18	Public Lecture, <u>University College London</u> , UK
Apr 18	Public Lecture, Summer School on Computing Resilience, <u>TU Munich</u> , Germany
Apr 18	Brown Bag Seminar, <u>Karlsruhe Institute of Technology</u> , Germany
Apr 18	Invited Lecture, <u>Fraunhofer Institute for Solar Energy Systems</u> , Germany
Oct 17	DIVA Day Daylighting Symposium, <u>University of California Berkeley</u> , CA, USA
Oct 17	Department Lecture Series, <u>Roger Williams University</u> , Bristol, RI
May 17	International Daylighting Symposium, <u>VELUX Foundation</u> , Berlin
Oct 16	DIVA Day Daylighting Symposium, <u>University of Toronto</u> , Canada

Jul 16	Research Seminar, Tsinghua University , Beijing, China
Dec 15	Research Seminar, IIT Bombay , Mumbai, India
Dec 15	Research Seminar, Universidade de Coimbra , Portugal
Oct 15	Plenum Presentation, New England Clean Energy Center , Boston
Oct 15	DIVA Day Daylighting Symposium, Architecture Association , London
Sep 15	International Daylighting Symposium, VELUX Foundation , London
Sep 15	MIT Solar Day, MIT Energy Initiative
Sep 15	Urbanization and Sustainable Development, China World Development Bank
Aug 15	Sustainable Urban Modeling, MIT Executive Education Program
Jun 15	Beyond Smart Cities Symposium, MIT Media Lab
Jun 15	Smart Buildings Symposium, German American Chamber of Commerce
Apr 15	Book Talk, PG&E Center , San Francisco
Apr 15	EFRI Closing Panel, National Science Foundation Workshop , San Francisco
Mar 15	Department Lecture Series, University of British Columbia , BC, Canada
Jan 15	Internal Research Seminar, ViewGlass , CA, USA
Oct 14	Inaugural Department Lecture, University of Washington , Seattle, WA, USA
Oct 14	Smart Cities Symposium, French American Chamber of Commerce Boston
Sep 14	Brown Bag Lunch, Synapse Energy , Cambridge, Ma, USA
Feb 14	Designing For Future Weather, online seminar organized by BuidingGreen Inc.
Feb 14	Executive Education Seminar, Charles Institute , Cambridge, MA
Feb 14	Lunch Series, MIT Concourse – Freshmen Organization
Feb 14	Annual Meeting of the North American Glass Association , Orlando, FL
Jan 14	Energy Accounts: Designing the Future, University of Pennsylvania
Dec 13	Stars of Building Science, Royal Academy of Engineering , London, UK
Oct 13	External Advisory Board Meeting, MIT Energy Initiative
Sep 13	Guest Lecture, Yale University
Jun 13	MIT 20 th Reunion Dinner Evening Speaker
May 13	b TEC/CIT UPC Annual Meeting, Barcelona, Spain
May 13	Daylighting Symposium, Velux Foundation , Copenhagen Denmark
May 13	Lighting Institute at Lightfair 2013, Philadelphia, USA
Apr 13	Lunch Series MIT City Science Lab
Mar 13	Interdisciplinary Student Sustainability Summit, Harvard University
Nov 12	Guest Lecture, Northeastern University
Nov 12	Software as a Design Choice, Women in Design Panel, ABX Boston
Oct 12	External Advisory Board Meeting, MIT Energy Initiative
Sep 12	Cambridge Public Library, Release of the Cambridge Solar Map
Aug 12	Evening Lecture, IBPSA New York Chapter
Jun 12	Das Haus, Building Technology Forum, German Chamber Network
Jun 12	Cambridge Day, City of Cambridge , MA, USA

May 12	Brown Bag Seminar, <u>EYP Architecture & Engineering</u> , Boston
Apr 12	Symposium on Sustainability and the Built Environment, <u>Harvard University</u>
Apr 12	Guest Lecture, <u>University of Pennsylvania</u> , PA, USA
Apr 12	Panel on Energy and the Built Environment, <u>MIT Energy Initiative</u>
Mar 12	Building Technology Lecture Series, <u>MIT</u> , MA, USA
Feb 12	Guest Lecture, <u>Boston Society of Architects</u> , Sustainable Education Committee
Jan 12	Guest Lecture, <u>Transsolar</u> , New York Office, New York, USA
Jan 12	Guest Lecture, <u>Atelier Ten</u> , New York Office, New York, USA
Dec 11	Ted Talk “Harvard Thinks Green”, <u>Harvard University</u>
May 11	VELUX 4th Daylight Symposium, <u>Velux Foundation</u> , Lausanne, Switzerland
Apr 11	Guest Lecture, <u>Catholic University of America</u> , Washington DC, USA
Mar 11	Seminar Series, <u>Lawrence Berkeley National Laboratory</u> , Berkeley, CA, USA
Mar 11	Advanced Management Development Program in Real Estate – Class X
Feb 11	School for Year 2030, GSD/HGSE Advanced Research Seminar, <u>Harvard GSD</u>
Feb 11	<u>IBPSA USA</u> – Boston Regional Chapter Kickoff Meeting
Nov 10	Ecological Practices: New Directions in Sustainability Research, <u>Harvard GSD</u>
Nov 10	National Science Foundation: When Engineering Design Meets Architecture, <u>University of Pennsylvania</u> , USA
Oct 10	Building Technology Lecture Series, <u>University of Toronto</u> , ON
Oct 10	Seminar, <u>National Organization of Minority Architects</u> (NOMA) conference
Oct 10	Building Technology Lecture Series, <u>MIT</u> , MA, USA
Jul 10	Guest Lecture, <u>University of California at Berkeley</u> , CA, USA
Jun 10	Climate Change & Indoor Environment Workshop, <u>National Academy of Sciences</u> , Washington DC, USA
May 10	Daylighting Forum, <u>IESNA</u> , Las Vegas, NV, USA
Apr 10	Panel Discussion at Design, Infrastructure Sustainability & Social Responsibility,
Mar 10	Materials Science Seminar Series, <u>Harvard FAS</u> , Cambridge, MA, USA
Mar 10	Faculty Seminar on Sustainable Housing, <u>Joint Center for Housing Studies</u> , USA
Feb 10	Guest Lecture, Advanced Management Development Program in Real Estate
Feb10	Evening Lecture, <u>Harvard Club of New York City</u> , NY, USA
Jan 10	Building Ecology, S & T Lecture Series, <u>University of Toronto</u> , Canada
Sep 09	Building Technology Lecture Series, <u>MIT</u>
Sep 09	<u>Harvard</u> Graduate Consortium on Energy and the Environment
Aug 09	<u>Fraunhofer</u> Institute for Solar Energy Systems, Freiburg, Germany
Aug 09	Panel Discussion at Building Simulation Conference 2009, Glasgow, UK
Aug 09	Building Simulation Conference 2009, <u>IBPSA</u> , Glasgow, UK
May 09	<u>AIA Philadelphia Chapter</u> , Philadelphia, PA, USA
May 09	Full-day workshop at <u>KlingStubbins</u> , Philadelphia, PA, USA
May 09	Daylighting Institute at Lightfair 2009, New York City, NY, USA
May 09	Daylight Boston 1 - Lecture Series on Daylighting, <u>Harvard University</u> , MA, USA

Apr 09 Panel Leader Ecological Urbanism conference, Harvard University, MA, USA
Mar 09 Brownbag Seminar at Simpson Gumbertz & Heger, Waltham Office, MA, USA
Nov 08 Greenbuild 2008 Offsite Educational Session at the GSD (with a MDesS students)
Oct 08 Public GSD Panel Discussion (with J. Kayden, C. Werthmann & T. Schroepfer)
Oct 08 Policy Advisory Board, Harvard Center for Housing Studies (with J. Spengler)
Oct 08 MArch II Proseminar (with Lluís Ortega), Harvard University, MA, USA
Jul 08 Seminar Universitaet Stuttgart, Stuttgart, Germany,
May 08 Daylighting Institute at Lightfair 2008, Las Vegas, USA
Dec 07 Canadian Green Building Council, Ottawa Chapter, Ottawa, Canada
Oct 07 MArch II Proseminar (with Toshiko Mori), Harvard University, MA, USA
Oct 07 CIE/Canada and CIE/USA Annual Technical Conference, Ottawa, Canada
Jun 07 Building Technology Transfer Forum, Annual meeting, Toronto, Canada
Apr 07 Harvard University, Cambridge, MA, USA
Mar 07 Cornell University, Ithaca, NY, USA
Jan 07 University of Toronto, Toronto, Canada
Nov 06 IEA Task 31, Final presentation to the Executive Committee, Rome, Italy
Sep 06 Canada-Japan Research & Development Workshop, Ottawa, Canada
Sep 06 Professional Engineers of Ontario, Ottawa, Canada
May 06 Lighting Institute at Lightfair 2006 (with Lisa Heshong), Las Vegas, USA
Apr 06 Green Building Exposition, Ottawa, Canada
Mar 06 McGill University, Montreal, Canada
Oct 05 Massachusetts Institute of Technology, Cambridge, MA, USA
Jul 05 University of Washington, Seattle, WA, USA
Apr 05 Lawrence Berkeley National Laboratory, Berkeley, CA, USA
Jun 04 Dalhousie University, Halifax, Canada
Jun 04 Building Technology Transfer Forum, Annual meeting, Halifax, Canada
Oct 03 École Polytechnique, Mechanical Engineering, Montréal, Canada
Oct 03 CIE/Canada and CIE/USA Annual Technical Conference, Montreal, Canada
Jan 03 Dalhousie University, Halifax, Canada
Apr 02 International Energy Agency, Workshop of Task 27 and 31, Copenhagen, Denmark
Oct 01 International Energy Agency, Expert meeting of Task 31, Berlin, Germany
Aug 01 Illuminating Engineering Society of North America, Annual Meeting, Ottawa
Oct 00 Lecture Series at Goethe Institutes in Beirut, Damascus, and Amman

CONFERENCE PRESENTATIONS

Nov 11 “Learning by doing - Teaching energy simulation as a game”, *IBPSA Conference 2011*, Sydney, Australia
Nov 11 “Shaderade: Combining Rhinoceros and EnergyPlus for the design of static exterior shading devices”, *IBPSA Conference 2011*, Sydney, Australia

- Nov 11 “Climate change risks form a building owner's perspective: Assessing future climate and price scenarios”, *IBPSA Conference 2011*, Sydney, Australia
- Nov 11 “A 'PICASA' for BPS – An interactive data organization and visualization system for building performance simulation”, *IBPSA Conference 2011*, Sydney, Australia
- Sep 07 “Daylight 1-2-3 – A state-of-the-art daylighting design software for initial design investigations”, *IBPSA Conference 2009*, Beijing, China.
- Sep 07 “The daylight coefficient method and complex fenestration”, *IBPSA Conference 2008*, Beijing, China.
- Aug 05 “A simulation-based review of the ubiquitous window-head-height to daylit zone depth rule of thumb”, *IBPSA Conference 2005*, Montreal, Canada.
- Aug 05 “Development and Validation of a Radiance model for a Translucent Panel”, *4th Annual Radiance Workshop*, Montreal, Canada.
- Aug 05 “A file format for Dynamic Daylight Simulations”, *4th Annual Radiance Workshop*, Montreal, Canada.
- Sep 04 “The Use of Daysim in Building Design”, *École Polytechnique*, Turin, Italy.
- June 04 “Key findings from an online survey on the use of daylight simulation programs”, *esim 2004 conference*, Vancouver, Canada.
- June 04 “Lightswitch – DOE2: A comparison of two manual blind control algorithms”, *esim 2004 conference*, Vancouver, Canada.
- Mar 04 “Key findings from a survey on the use of daylight simulation programs”, *IEA International Daylighting Symposium*, Tokyo, Japan.
- Oct 03 “Lightswitch: A Model for Manual Control of Lighting and Blinds.” *CISBAT conference*, Lausanne, Switzerland.
- Aug 03 “The Lightswitch Wizard – Reliable daylight simulations for initial design investigation.” *IBPSA Conference 2003*, Eindhoven, The Netherlands.
- Aug 02 “Effects of interior design on the daylight availability in open plan offices.”, *ACE³ 2002 Summer Study on Energy Efficient Buildings*, Pacific Grove, California.
- Oct 02 “Effects of Blind Control on the Electric Lighting Energy Demand in Offices.” *Joint meeting of Task 31 and CIE Division 3*, Ottawa, Canada.
- Jan 01 “Monitoring and Analysis of Manual Control Strategies for Artificial Lighting and Venetian Blinds of 20 users – Experimental Setup and Preliminary Results.”, *7th Symposium on Lighting Buildings* in Staffelstein, Germany.
- Aug 00 “Lean buildings: Energy Efficient Commercial Buildings in Germany.”, *ACE³ 2000 Summer Study on Energy Efficient Buildings*, Pacific Grove, California.
- Jan 00 “RADIANCE – Jahressimulationen des Tageslichtangebotes in Gebäuden – Ein Raytracer viele Ergebnisse.” *6th Symp. on Lighting Buildings*, Staffelstein, Germany.
- Sep 99 “An Evaluation of RADIANCE Based Simulations of Annual Indoor Illuminance Distributions due to Daylight.” *IBPSA Conference 99*, Kyoto, Japan.
- Jun 99 “Die Beleuchtungskonzepte der SolarBau:MONITOR TK 3 Projekte – Eine Übersicht.” *SolarBau:MONITOR daylighting workshop*, Kassel, Germany.
- Jan 99 “Planung eines Büroneubaus – Tageslichtsimulation als Entscheidungshilfe in der Entwurfsphase.” *5th Symposium on Lighting Buildings*, Staffelstein, Germany.

EXHIBITIONS

- Apr 11 “Ceramic Futures”, *Harvard University GSD* (with M Bechthold)
Nov 08 “Modeling Gund Hall”, *Harvard University GSD*

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

1. C Reinhart, *Climate-Driven Design I*, Building Technology Press, Cambridge, 2025
2. A Irani, E Reinhard E and C Reinhart, *HVAC Design for Architects*, Building Technology Press, Cambridge, 2025
3. C Reinhart, *Daylighting Handbook II – Daylight Simulations & Dynamic Facades*, Building Technology Press, Cambridge, 2018
4. C Reinhart and C Davila Cerezo, “Urban Building Energy Modeling,” book chapter in *Building Performance Simulation for Design and Operation*, 2nd edition, Editors J Hensen and R Lamberts, Taylor & Francis, 2019
5. C Reinhart, “Daylight Performance Predictions,” book chapter in *Building Performance Simulation for Design and Operation*, 2nd edition, Editors J Hensen and R Lamberts, Taylor & Francis, 2019
6. C Reinhart, *Daylighting Handbook I – Fundamentals & Designing with the Sun*, Building Technology Press, Cambridge, April 2014
7. C Reinhart, “Simulation-based Daylight Performance Predictions,” book chapter in *Building Performance Simulation for Design and Operation*, Editors J Hensen and R Lamberts, Taylor & Francis, 2011
8. C Reinhart and M Wambsganß, “Zusammenspiel Kunstlicht/Tageslicht.“ chapter in *Bürogebäude mit Zukunft – Konzepte, Erfahrungen, Analysen*, TÜV Verlag, Colon, Germany, pp.118-130, 2005 (The book won the 2005 Innovation Price of the German Printing Industry.)
9. C Reinhart, “Energy Efficient Solar Buildings.” chapter in *The Future for Renewable Energies: Prospects and Directions*, James & James, London, pp. 79-114, 2002
10. C Reinhart, *Daylight Availability and Manual Lighting Control in Office Buildings – Simulation Studies and Analysis of Measurements*. Fraunhofer IRB Verlag, Stuttgart, Germany, 2001

PAPERS IN REFEREED JOURNALS

1. N. Tarkhan, D B Crawley, L K Lawrie and C Reinhart, 2025, Generation of representative meteorological years through anomaly-based detection of extreme events, *Journal of Building Performance Simulation*, 1–18, <https://doi.org/10.1080/19401493.2025.2499687>
2. N Tarkhan, N Klimenka, K Fang, F Duarte, C Ratti and C Reinhart, 2025, Mapping facade materials utilizing zero-shot segmentation for applications in urban microclimate research, *Nature Scientific Reports*, 15, 5492, <https://doi.org/10.1038/s41598-025-86307-1>
3. Z Berzolla, T Meng and C Reinhart, 2025, Deal or no deal: U.S. homeowners’ willingness to pay for residential building retrofits, *Environmental Research: Infrastructure and Sustainability*, 5, 015007, <https://iopscience.iop.org/article/10.1088/2634-4505/adac09>
4. T Wang, C Reinhart and YQ Ang, 2025, sat2shp: Extracting key building features from a single satellite image for urban building energy modelling and

- beyond, *Sustainable Cities and Society*, 118, 106054, <https://doi.org/10.1016/j.scs.2024.106054>
5. S Herb, S Wolk and C Reinhart, 2025, “Beyond the Bioclimatic Chart: An Automated Simulation-Based Method for the Assessment of Natural Ventilation and Passive Design Potential,” *Building and Environment*, 112362, <https://doi.org/10.1016/j.buildenv.2024.112362>
 6. R E Weber, C Mueller and C Reinhart, 2024, “A hypergraph model shows the carbon reduction potential of effective space use in housing,” *Nature Communications*, 15, 8327, <https://doi.org/10.1038/s41467-024-52506-z>
 7. N Tarkhan, J T Szcześniak and C Reinhart, 2024, Façade Feature Extraction for Urban Performance Assessments: Evaluating algorithm applicability across diverse building morphologies, *Sustainable Cities and Society*, <https://doi.org/10.1016/j.scs.2024.105280>
 8. M Vahid-Ghavidel, M Jafari, S Letellier-Duchesne, Z Berzolla, C Reinhart, A Botterud, 2024, Integrated energy demand-supply modeling for low-carbon neighborhood planning, *Applied Energy*, 358, <https://doi.org/10.1016/j.apenergy.2023.122560>
 9. C Reinhart, 2023, Linking Energy Use to Local Data, *Nature Energy*, 8, p.1311–1312, <https://doi.org/10.1038/s41560-023-01407-4>
 10. Z Berzolla, Y Q Ang, S Letellier-Duchesne and C Reinhart, 2023, An eight-step simulation-based framework to help cities reach building-related emissions reduction goals, *Environmental Research: Infrastructure and Sustainability*, 4:3, pp.2634–4505, <https://doi.org/10.1088/2634-4505/ad025d>
 11. Y Q Ang, Z Berzolla and C Reinhart, 2023, Smart meter-based archetypes for socioeconomically sensitive urban building energy modeling, *Building and Environment*, 246, <https://doi.org/10.1016/j.buildenv.2023.110991>
 12. S Mokhtar and C Reinhart, 2022, Towards Scalable and Actionable Pedestrian Outdoor Thermal Comfort Estimation: A Progressive Modelling Approach, *Building and Environment*, 242, <https://doi.org/10.1016/j.buildenv.2023.110547>
 13. Y Nidan, A Irani, J Bemis and C F Reinhart, 2023, Census-Based Urban Building Energy Modeling to Evaluate the Effectiveness of Retrofit Programs, *Environment and Planning B: Urban Analytics and City Science*, pp. 1 - 13, <https://doi.org/10.1177/23998083231154576>
 14. YQ Ang, ZM Berzolla, S Letellier-Duchesne and C F Reinhart, 2023, Carbon reduction technology pathways for existing buildings in eight cities, *Nature Communications*, 14, 1689, <https://doi.org/10.1038/s41467-023-37131-6>
 15. R A Weber, C Mueller and C Reinhart, 2022, Solar exoskeletons – An integrated building system combining solar gain control with structural efficiency, *Solar Energy*, 240, pp. 301 – 314, <https://doi.org/10.1016/j.solener.2022.05.048>
 16. R A Weber, C Mueller and C Reinhart, 2022, Automated floorplan generation in architectural design: A review of methods and applications, *Automation in Construction*, 140, article 104385, <https://doi.org/10.1016/j.autcon.2022.104385>
 17. Y Q Ang, Z Berzolla, S Letellier-Duchesne, V Jusiega and C Reinhart, 2022, UBEM.io: A web-based Framework to Rapidly Generate Urban Building Energy Models for Carbon Reduction Technology Pathways, *Sustainable Cities and Society*, 2022, 77, <https://doi.org/10.1016/j.scs.2021.103534>
 18. E Young, P Kastner, T Dogan, A Chokhachian, S Mokhtar and C Reinhart, 2022, Modeling Outdoor Thermal Comfort Along Cycling Routes At Varying Levels Of Physical Accuracy To Predict Bike Ridership In Cambridge, MA, *Building and Environment*, 208, <https://doi.org/10.1016/j.buildenv.2021.108577>

19. J T Szcześniak, Y Q Ang, S Letellier-Duchesne and C F Reinhart, 2022, “A Method for Using Street View Imagery to Auto-extract Window-To-Wall Ratios and its Relevance for Urban-level Daylighting and Energy Simulations,” *Building and Environment*, 207, Part B, <https://doi.org/10.1016/j.buildenv.2021.108108>
20. M Liebman-Pelaez, J Kongoletos, L K Norford and C F Reinhart, 2021, “Validation of a Building Energy Model of a Hydroponic Container Farm and its Application in Urban Design,” *Energy and Buildings*, 250, <https://doi.org/10.1016/j.enbuild.2021.111192>
21. I Turan, A Chegut, D Fink and C Reinhart, 2021, “Development of View Analysis Metrics and Their Financial Impacts on Office Rents,” *Landscape and Urban Planning*, 215, <https://doi.org/10.1016/j.landurbplan.2021.104193>
22. N Buckley, G Mills, C Reinhart and Z M Berzolla, 2021, “Using Urban Building Energy Modelling (UBEM) to support the new European Union’s Green Deal: Case study of Dublin Ireland,” *Energy and Buildings*, 247, 2021, 111115, <https://doi.org/10.1016/j.enbuild.2021.111115>
23. K Benis, W Alhayaza, A Alsaati and C Reinhart, 2021, “What’s the carbon content of your food?”: Development of an interactive online foodprint simulator,” *WIT Transactions on Ecology and the Environment*, 243, 2020, pp. 123 – 132, <https://doi.org/10.2495/UA200111>
24. Y Q Ang, Z M Berzolla and C Reinhart, 2020, “From concept to application: A review of use cases in urban building energy modeling,” *Applied Energy*, 279:1, <https://doi.org/10.1016/j.apenergy.2020.115738>
25. R Weber, N Oxman, C Reinhart, 2020, “Photon Mapping of Geometrically Complex Glass Structures: Methods and Experimental Evaluation,” *Building and Environment*, Volume 180, <https://doi.org/10.1016/j.buildenv.2020.106957>
26. I Turan, A Chegut, D Fink and C Reinhart, 2020, “The Value of Daylight in Office Spaces,” *Building and Environment*, 168, <https://doi.org/10.1016/j.buildenv.2019.106503>
27. Schweiker, M., Abdul-Zahra, A., André, M. et al., 2019, “The Scales Project, a cross-national dataset on the interpretation of thermal perception scales,” *Sci Data*, 6, 289, <https://doi.org/10.6084/m9.figshare.9805289>
28. E Barbour, C Davila Cerezo, S Gupta, C Reinhart, J Kaur and M Gonzalez, 2019, “Planning for sustainable cities by estimating building occupancy with mobile phones,” *Nature Communications*, 10, <https://doi.org/10.1038/s41467-019-11685-w>
29. S Nagpal, J Hanson and C F Reinhart, 2019, “A framework for using calibrated campus-wide building energy models for continuous planning and greenhouse gas emissions reduction tracking,” *Applied Energy*, 241, pp. 82-96, <https://doi.org/10.1016/j.apenergy.2019.03.010>
30. N L Jones and C F Reinhart, 2019, “Effects of real-time simulation feedback on design for visual comfort,” *Journal of Building Performance Simulation*, 12:3, pp. 343-361, <https://doi.org/10.1080/19401493.2018.1449889>
31. J Dhariwal, P Manandhar, L Bande, P Marpu, P Armstrong and C F Reinhart, 2019, Evaluating the effectiveness of outdoor evaporative cooling in a hot, arid climate, *Building and Environment*, 150, pp. 281–288, <https://doi.org/10.1016/j.buildenv.2019.01.016>
32. S Nagpal and C F Reinhart, 2018, “A comparison of two modeling approaches for establishing and implementing energy use reduction targets for a university campus,” *Energy and Buildings*, 173, pp. 103–116, <https://doi.org/10.1016/j.enbuild.2018.05.035>

33. P Gianniou, C F Reinhart, D Hsu, A Heller and C Rode, 2018, "Estimation of temperature setpoints and heat transfer coefficients among residential buildings in Denmark based on smart meter data," *Building and Environment*, 139, pp. 125–133, <https://doi.org/10.1016/j.buildenv.2018.05.016>
34. S Nagpal, C Mueller, A Aijazi and C F Reinhart, 2018, "A methodology for auto-calibrating urban building energy models using surrogate modeling techniques," *Journal of Building Performance Simulation*, 12:1, pp. 1–16, <https://doi.org/10.1080/19401493.2018.1457722>
35. S Letellier-Duchesne, S Nagpal, M Kummert and C F Reinhart, 2018, "Balancing demand and supply: Linking neighborhood-level building load calculations with detailed district energy network analysis models," *Energy*, 150, pp. 913–925, <https://doi.org/10.1016/j.energy.2018.02.138>
36. K Benis, I Turan, C F Reinhart and P Ferrão, 2018, "Putting Rooftops to Use – a Cost-Benefit Analysis of Food Production vs. Energy Generation under Mediterranean Climates," *Cities*, 78, pp. 166–179, <https://doi.org/10.1016/j.cities.2018.02.011>
37. Freitas, C F Reinhart, M C Brito, 2018, "Minimizing storage needs for large scale photovoltaics in the urban environment," *Solar Energy*, 159:1, pp.375–389, <https://doi.org/10.1016/j.solener.2017.11.011>
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39. K Benis, R Gashgari, A Alsaati and C F Reinhart, 2018, "Urban Foodprints (UF) – Establishing baseline scenarios for the sustainability assessment of high-yield urban agriculture," *International Journal of Design & Nature and Ecodynamics*, 13:4, pp. 349–360, <https://doi.org/10.2495/DNE-V13-N4-349-360>
40. C S Monteiro, A Pinaa, C Cerezo Davila, C F Reinhart and P Ferrão, 2017, "The Use of Multi-detail Building Archetypes in Urban Energy Modelling," *Energy Procedia*, 111, pp. 817–825, <https://doi.org/10.1016/j.egypro.2017.03.244>
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Christoph Reinhart, Tuesday, May 13, 2025