

Justin Booz

justinbooz.com

Education

2025 - present

Candidate, Doctor of Sciences, Geomatic Engineering

ETH Zürich, Department of Civil, Environmental and Geomatic Engineering, Zürich, Switzerland

2020 - 2021, 2022 - 2025

Dual Master of Landscape Architecture // Master of Design Studies: Mediums (*computational design*)

Harvard University, Graduate School of Design, Cambridge, Massachusetts, USA

Distinction

2016 - 2020

Bachelor of Arts, Architecture

Columbia University in the City of New York, New York, NY, USA

magna cum laude

Professional Experience

2025 - present

Scientific Assistant, Planning of Landscape and Urban Systems (PLUS)

ETH Zürich, Institute for Spatial and Landscape Development (IRL), Zürich, Switzerland

2021 - 2025

Research Assistant, Harvard University, Cambridge, MA: Office for Urbanization (Waldheim), Craig Douglas, Karen Lee Bar-Sinai

AI development, sensor design and prototyping, simulations and modeling, drawings and renderings, archival research

2021 - 2025

Design Intern // Landscape Designer // Freelance Designer, Studio Zewde, New York, NY

notable projects: Chalet Africain (CH), Dia: Beacon (USA), Bal Harbor Shops (USA), Miller Prize (USA), more available on request

2024 - 2025

Designer and Research Assistant, Responsive Environments and Artifacts Lab/NVIVIA, Cambridge, MA

narrative development and drawings

2019 - 2020

Technical Intern, Mayor Bill De Blasio, Office of Environmental Remediation, New York, NY

site analysis, documentation, research, social media

2016 - 2019

Graphic Designer, Columbia University, New York, NY: Office of Global Programs, Columbia College, Community Impact

visual communications material, copywriting, editing, transcription

2013 - 2015

Advisory Board Member (appointed), Greenheart International, Chicago, IL

pedagogical support for Camp Greenheart, urban agriculture networking, Oxfam guidance and collaboration

2012 - 2015

Co-Founder and Director (elected), The Cooperation Operation, Chicago, IL

organization leadership, design, construction, fundraising, public relations, communications

Teaching

2025

Workshop Instructor, University of Cincinnati, College of Design, Architecture, and Planning, Cincinnati, OH

Smart City Design with AI, Topic: Introduction to classifier models in python and ArcGIS

2021 - 2025

Teaching Assistant, Harvard University, Graduate School of Design, Cambridge, MA

MLA Thesis (Waldheim); Atmospheric Encounters, LA Core II, and Rep II (Douglas); Digital Media Workshop (Dept. of LA)

2022 - Present

Visiting Design Review Critic

Harvard University, Columbia University, Paris School of Architecture, Wentworth Institute of Technology

Research & Publications

2025 (Working)

Artificial Intelligence and the Future of Landscape Pedagogy, TAD Journal (with Kira Clingen, Sang Cho, Tom Sterling)

2025 (Working)

Pyrotechnics: Implementation of Artificial Intelligence in the Design of Post-Disaster Landscapes, ACADIA Journal of Architectural Computing

2025

Sensing the Living City: A Scalable Platform for Monitoring the Electrophysiology of Urban Forests, Journal of Digital Landscape Architecture

2025

A Machine Learning Model to Identify Historic Wetlands in an Area of Critical Environmental Concern, Journal of Digital Landscape Architecture

2023

Claiborne Avenue Research (New Orleans, LA), presented to the Emerson Collective

2019

Urban Eco-Acoustics May Drive Passerine Speciation, Department of Ecology, Evolution, and Environmental Biology (Columbia)

2019

The Impact of Freshwater Runoff and Eutrophication in Tala Bay, Gulf of Aqaba, Jordan, Department of Sustainable Development (Columbia)

Lectures & Exhibitions

2025

Sensing the Living City: A Scalable Platform for Monitoring the Electrophysiology of Urban Forests, JoDLA Conference, Dessau, Germany

2025

A Machine Learning Model to Identify Historic Wetlands in an Area of Critical Environmental Concern, JoDLA Conference, Dessau, Germany

2025

Digital Tools and the Future of Landscape Architecture: Exploring New Frontiers, Panel, International Federation of Landscape Architects

2025

Landscape Architecture in the Age of Planetary Computation, School of Planning Lecture Series, University of Cincinnati, Cincinnati, USA

2025

Cool Forest, collaboration with SCAPE, Venice Biennale 2025, Venice, Italy

2024

Sensing the Living City: A Scalable Platform for Monitoring the Electrophysiology of Urban Forests, Landscape Technology Forum, Harvard

2024

Omnipresence: Machine Vision in the Adversarial City, Solo exhibition and talk, Harvard University, Cambridge, MA

2022

Dia: Beacon Design Drawings (with Studio Zewdel), Group Exhibition, Dia: Chelsea, New York, NY

Technical Abilities

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| Programming Languages | Python, C++, C#, R |
| Machine Learning/AI | Supervised, Semi-Supervised, Unsupervised, Reinforcement, Surrogate Modelling |
| Simulation | computational fluid dynamics, pyro |
| Physical Computing | Circuit Development, Prototyping, PCB manufacturing, Sensor Development, IoT, Networking |
| Graphic Design | Photoshop, Illustrator, InDesign |
| CAD/CAM | Rhino, AutoCAD, Revit, Blender |
| Rendering | V-Ray, Lumion, Twinmotion, Redshift, Enscape, Cycles |
| Special Effects | Blender, Cinema4D, Houdini, Red Giant, Maya |
| Game Engines | Unreal Engine, Unity |
| Video | AfterEffects, Premier |
| GIS | ArcGis Pro, CityEngine, Google Earth, ArcPy |
| Drone/UAV | Piloting, Programming, Photogrammetry, Gaussian Splatting, NeRFs |
| Physical Computing | Arduino, Raspberry Pi, Adafruit Feather |
| Environmental Analysis | Soils, Water, Topographic |
| Fabrication | Woodworking, Metalworking, 3D Printing, Laser Cutting, CNC, Soldering, Clay, Foam, Large-Format Printing |

Languages

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| English | Native |
| French | Fluent, C1 |
| German | Beginner, A1 |

Awards, Grants, Fellowships

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| 2025 | MDes: Mediums Domain Prize |
| 2025 | Norman T. Newton Prize, Department of Landscape Architecture |
| 2024 | Dean's Scholar, Harvard University Graduate School of Design |
| 2023 | Penny White Project Fund Grantee, Harvard University Graduate School of Design |
| 2020 | Dean's Scholar, Harvard University Graduate School of Design |
| 2019 | Columbia Global Scholar, Columbia University in the City of New York |
| 2018 | Beesen Global Research Fellow, Columbia University in the City of New York |
| 2018 | Center for French and Francophone Studies Fellow, Columbia University in the City of New York |
| 2016 | Full Merit Scholarship, Columbia University in the City of New York |

Avocations & Hobbies

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| Since 2020 | Cross-Country Running |
| Since 2010 | Cycling |
| Since 2009 | Mycology |
| Since 2008 | Circuit Bending |
| Since 2006 | Cooking |
| Since 2006 | Gardening |

Press

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|---|--|
| Cochran, Sam. 2024. "Tour an Out of This World Home in the Swiss Alps." Architectural Digest. December 4, 2024. https://www.architecturaldigest.com/gallery/tour-an-out-of-this-world-home-in-the-swiss-alps . | |
| Alexander, Tieg. "The Coop Op Transforms Toxic Waste Site into Community Garden." Greenheart Transforms 1 January 2014: 1-2. Online. | |
| Bellware, Kim. "Cooperation Operation Turns Former Toxic Waste Site Into Pullman Community Garden." Huffington Post 19 August 2013: 1-2. Online. | |
| Cynic, Aaron. "Coop Op Transforms a Vacant Lot in South Chicago." The Christian Science Monitor. The Christian Science Monitor, 01 Nov. 2013. Web. 14 Dec. 2013. | |
| Goldhammer, Zachary. "In Pullman, The Sunflower Also Rises." Chicago Weekly 25 April 2013: 1-3. Online. Goldhammer's article also appears on City Farmer News. | |
| Jones, Sylvia L. "'Coop Op' Turns Pullman Eyesore into Community Asset." ABC7 Chicago. ABC7 News, 30 Aug. 2014. http://abc7chicago.com/society/coop-op-turns-pullman-eyesore-into-community-asset/288010/ | |
| Maher, Sean. "BEST ECOLOGICAL ARK: Cooperation Operation" Southside Weekly 25 September 2013: Print. | |
| Pfeifer, Jamison. "The Pullman Punk Ethic." Chicago Weekly 1 March 2013: 1-2. Online. | |
| Richardson, Whitney. "Chicago 'Cooperation Operation' to Transform South Side Lot into Creative Farm-scape." Agrarian Trust 4 May 2013: 1-2. Online. article also appears on the Greenhorns website | |
| Sánchez, Erika L. "Pullman Residents Turn Former Toxic Waste Site into Community Garden." DNAinfo Chicago 19 August 2013: 1-3. Online. | |
| Saunders, Luke. "Bumper Crop in Food Desert." Grinnell Review 2 January 2014: 1. Online. | |
| Vogel, Erin. "Cooperation Operation Fights Food Desert in South Side Neighborhood." RedEye 22 July 2013: 1-3. Online. Vogel's article also appears in The Sun Sentinel. | |