

DANIEL LOCATELLI

Architecture is a transdisciplinary field, and its future lies in using computational, co-designed, and cybernetic techniques combined with vernacular eco-friendly materials

arquiteto.locatelli@gmail.com +49 178 324-0834

Experience

01/2024 → Present

Software Developer

BuildSystems GmbH, | Munich, Germany

4 The startup Urban Scale Timber became BuildSystems.

Web app Funding Calculator: Tech stack, UI/UX, and development of the in Angular 17. BuildSystems' website: development in Astro 4 leveraging Notion's API to have Notion as a content management system (CMS).

 $01/2023 \rightarrow 12/2023$

Computational Architect

Urban Scale Timber, Flügge Funding | Munich, Germany

→ The startup is now called BuildSystems.

Development of a toolbox in C# for Grasshopper; Data visualization with Power BI; Tech stack and UI/UX for the web app Circular Component Creator.

12/2021 → 12/2022

Computational Architect

ArtEnGineering GmbH | Schorndorf, Germany

Algorithmic modeling and structural analyses of pavilions and artworks.

10/2020 → 11/2021

Computational Architect

Alfred Rein Ingenieure GmbH | Stuttgart, Germany

Honorable mention Wiesbaden "Witterungsschutz Römermauer," algorithmic modeling.

12/2019 → 10/2020

Research Assistant

ICD/ITKE University of Stuttgart | Stuttgart, Germany

Natural fiber structural test w/ Marta Gil Pérez; Carbon fiber winding w/ Christoph Schlopschnat; Design and modeling w/ Dylan Wood; ICD website migration w/ Tobias Schwinn.

 $03/2015 \rightarrow 07/2019$

Computational Architect*

Atelier Marko Brajovic | São Paulo, Brazil

Conceptual design, project management, BIM modeling, traditional and algorithmic modeling, renderings, prototyping, digital fabrication, and contact with suppliers. *Intern until Dec 2016

 $06/2014 \rightarrow 08/2014$

On-the-job Training

California State University Long Beach | Long Beach, United States Project management, Site visits, BIM Modeling, Safety and Health Training Cal/OSHA Construction 10h.

 $06/2011 \rightarrow 08/2013$

Graphic Designer

Biomedical Science Institute, University Of São Paulo | São Paulo, Brazil

Conceptual design, supervised project management, and organization of competitions.

Education

 $10/2019 \rightarrow 10/2021$

Master of Sciences

ITECH University of Stuttgart | Stuttgart, Germany

Building Across Scales: A Robotic Timber Fabrication System for On-Site Press Gluing

 $01/2010 \rightarrow 12/2016$

Bachelor of Architecture and Urbanism

Architecture and Urbanism College – FAU-USP | São Paulo, Brazil Architecture + Biomimetics + Algorithm

 $01/2014 \rightarrow 12/2014$

Architecture Exchange Student

Auburn University - CADC | Auburn, United States

08/2013 → 12/2013

Intensive English Program

Auburn University | Auburn, United States

Scholarships

03/2021

IntCDC Master's Thesis Grant 2021

Cluster of Excellence Integrative Computational Design and Construction for Architecture (IntCDC)

The Grant encourages excellent master's students to realize a first step toward a prospective academic career.

 $08/2013 \rightarrow 12/2014$

Science without Borders

Brazilian Federal Government

A fully funded scholarship of one year at Auburn University, USA.

E-Book

02/2020

Design Computacional – Estratégias

A catalog of 30 computational design strategies with references.

Skills

- HTML, CSS, JavaScript | Advanced
- SQL & NoSQL database | Advanced
- Angular framework | Intermediate
- Python| Intermediate
- C# | Intermediate

- Rhino + Grasshopper | Fluent
- Revit | Certified Professional
- Digital Fabrication | Advanced
- Adobe Package | Advanced
- UI/UX | Intermediate

Peer-reviewed papers

06/2023

Feedback-Based Design Method for Spatially-Informed and Structurally-Performative Column Placement in Multi-Story Construction

5th Conference on Computational Design and Robotic Fabrication CDRF 2023 | Beijing, China

Authors: Ekin Sila Sahin; Daniel Locatelli; Luis Orozco; Anna Krtschil; Hans Jakob Wagner; Achim Menges; Jan Knippers

06/2020

Life Lamp: Connecting Design and People Through Emotion

ECAADE 2020 Anthropologic | Berlin, Germany

Authors: Daniel Locatelli; Leonardo Prazeres; Guilherme Giantini; Vitor Curti; Carlos Augusto Requena

11/2018

High-Low as an expression of the Brazilian digital fabrication

SiGradi 2018 Technopolitics | São Carlos, Brazil

Authors: Daniel N Locatelli; Arthur H Lara; Ruy M O Pauletti; Thiago H Omena; Adalberto de Paula

09/2017

Algorithmic design for traditional bobbin lace methods

IASS 2017 | HAMBURG, GERMANY

Authors: Daniel N Locatelli; Arthur H Lara; Ruy M O Pauletti; Thiago H Omena

Tutoring

06/2019 & 07/2019

Models byNature

Workshop | São Paulo, Brazil

This workshop sought to connect computational design practices with natural phenomena, addressing associative modeling, biomimetics, and visual programming language.

12/2018

Tensegrity Workshop

Atelier Marko Brajovic internal workshop | Paraty, Brazil

The team that formed the Atelier Marko Brajovic got together to develop a tensegrity collectively.

06/2018

Adaptive Grasshopper Workshop

XIV SAU UNEMAT | Barra do Bugres, Brazil

The students had the opportunity to choose one design approach to learn between many other well-known methods in the computational design field: in this case, the "Exoskeleton."

Grasshopper & Kangaroo Workshop

Porto FabLab | São Paulo, Brazil

The students learned to work with spring systems to simulate a cloth behavior.

02/2017

Private Revit Lessons

São Paulo, Brazil

Revit lessons from the basic principles to advanced techniques.

Talks & Lectures

12/2023

Vision Nachhaltigkeit

Graphisoft X | Online

11/2023

Arquitetura Computacional

Architecture and Urbanism course at UFT | Online

09/2023

Arquitetura Computacional na Alemanha: Estado da arte

Architecture and Urbanism course at IFPR | Online

03/2022

Digital Futures Portuguese Talk

Online

11/2020

Computational Design: Strategies

UNIP Sorocaba | Online

10/2020

Computational Design: Strategies

PUC Minas | Online

07/2019

Architecture + Biomimetics + Algorithm

Architecture and Urbanism Course at IFRO | Vilhena, Brazil

03/2019

Emotional Design and Technology

SEBRAE TALKS, MOVELPAR 2019 | Arapongas, Brazil

09/2018

Parametric Design Inspired by Nature

Semana Design Rio 2018 | Rio de Janeiro, Brazil

08/2018

Biomimetic Geometries

Tátil | Rio de Janeiro, Brazil

Architecture + Biomimetics + Algorithm

XIV SAU UNEMAT | Barra do Bugres, Brazil

08/2017

Architecture + Biomimetics + Algorithm

Istituto Europeu di Design (IED) | São Paulo, Brazil

12/2016

Form-finding with Grasshopper

II Structured Shell Meeting | FAU/POLI USP, São Paulo, Brazil

Certifications

07/2023 → 10/2023 (final project pending)

CS50's Introduction to Computer Science

Harvard University & edX.org

08/2018

PYTHON | 6.00.1x Intro to Computer Science and Programming Using Python

MITX & edX.org

09/2015 & 09/2016

Revit Architecture Certified Professional Exam

Autodesk University Brazil 2016 | São Paulo, Brazil

07/2013

Safety & Health Training

CAL/OSHA Construction 10 Hours

Freelance Works

05/2018

Life Lamp

Concept by Estudio Guto Requena for Decimal

Computational designer responsible for the code.

12/2017 → Ongoing

Margarita House Refurbishment

House Refurbishment project | São Paulo, Brazil

Architect in charge of design.

06/2016 → **11/2016**

Le Sandwich: Restaurant Refurbishment

Restaurant Refurbishment | São Paulo, Brazil

Principal architect in charge of design, production, bidding, and construction supervision.

Courses and Workshops

06/2020 → **07/2020**

Intelligence

Digital Futures World 2020

Tutors: Neil Leach, Antoine Picon, Sanford Kwinter, and Marrikka Trotter

Wiki-House: Generation and Digital-Material Construction

Iberoamerican Society of Digital Graphics (SIGraDi 2018)

São Carlos, Brazil

Tutors: Gonçalo Castro Henriques, and Andrés Passaro

09/2017

Interfacing Architecture, Engineering, and Mathematical Optimization

Symposium of the IASS 2017 | Hamburg, Germany

Tutors: Thomas Wortmann and Judyta Cichocka

07/2017

Parametric Design with Arduino and Grasshopper

Electronic Language International Festival (FILE) | São Paulo, Brazil Tutor: Henrique Stabile

09/2016

Workshop GH3 Galapagos

Rhino Day | FAU-Mackenzie, São Paulo, Brazil

Tutor: Victor Calixto

07/2016

Digital Theremin with Arduino

Electronic Language International Festival (File) | São Paulo, Brazil

Tutor: Mauricio Jabur

07/2016

Data in the Design Process

Electronic Language International Festival (File) | São Paulo, Brazil

Tutors: Dyego Digiandomenico, Gabriele Landim, Henrique Fischer

06/2016

Introduction to Woodwork

Fab Lab Livre SP | São Paulo, Brazil

Tutor: Lucas S. M. Coutinho

06/2016

Arduino & LEDS

Fab Lab Livre SP | São Paulo, Brazil

Tutor: Beatriz da Rocha

06/2016

Electronics in the darkness

Red Bull Station | São Paulo, Brazil

Tutor: Lina Lopes

06/2016

Basic Electronics

Fab Lab Livre SP | São Paulo, Brazil

Tutor: César A. G. de Alencar

05/2016

Interactivity: Architecture and Responsive Design

Fab Lab Livre Sp | São Paulo, Brazil

Tutor: Ruairi Glynn and Grad Students from UCL

Fundamentals of Computation with Processing

FAU-USP | São Paulo, Brazil

List of Works at Atelier Marko Brajovic

 $01/2019 \rightarrow 08/2019$

BlastU 2019

Parametric set and interior design.

Ibirapuera bienal pavilion, São Paulo, Brazil

Architect in charge of design and supervision.

06/2019

Casa e Jardim Award 2019

Scenic design

Pinacoteca de São Paulo, São Paulo, Brazil

Architect in charge of the design and set-up follow-up.

04/2019

Casa ITA

House Design

Paraty, Brazil

Architect in charge of the design.

 $02/2019 \rightarrow 04/2019$

Itaú Rock in Rio 2019

PARAMETRIC stage architecture

Rio de Janeiro, Brazil

Architect in charge of the design and city code compliance (archived).

01/2019

Embraer Pavilion

Paris, France

Architect in charge of the parametric façade.

12/2018

Camper Thailand

Parametric Interior Design

Thailand

Architect in charge of the design (archived).

11/2018

The First Blow | Embraer

Augmented Reality Sculpture

T3 International Airport, São Paulo, Brazil

Computational design support.

11/2018 → 12/2018

Animale Jewelry

Parametric Façade

Rio de janeiro, Brazil

Architect in charge of the design.

 $07/2018 \rightarrow 10/2018$

Hitchcock - Suspense Backstage

Exhibition

MIS - Museu da Imagem e do Som, São Paulo, Brazil

Renderings.

 $06/2018 \rightarrow 11/2018$

Bar & Stage Heineken: Live Your Music

Meca Festival | Itinerant

Architect in charge of the parametric design, production, and supervision.

 $03/2018 \rightarrow 04/2018$

Nike Air Guitar

Interactive Installation

Red Bull Station, São Paulo, Brazil

Architect in charge of the design, production, programming and supervision.

08/2017

Tidelli Wave

Installation

Tidelli showroom, São Paulo, Brazil

Architect in charge of supervision.

 $01/2017 \rightarrow 12/2017$

Homa Restaurant Refurbishment

Interior Design

São Paulo, Brazil

Architect in charge of design and production.

06/2017

InsideOut

Product Design

MOVECHO

Architect in charge of the design (archived).

2016 → 2017

House ASHA

House Design

Paraty, Brazil

Architect in charge of detailing and supplier contact.

03/2017

O3 Pavilion

Parametric Pavilion

Expo revestir 2016, São Paulo, Brazil

Responsible for the form-find of the final shape and to extract the documentation necessary for production

10/2016

Live Talks installation

Installation

Live talks 2016, São Paulo, Brazil

Intern in charge of the design studies, production, and supervision.

Parada Coca-Cola

Festival

Pier Mauá, Rio de Janeiro, Brazil

Intern in charge of the code to extract the documentation necessary for production

04/2016

Coca-Cola Taste of Fashion

Set and interior design

São Paulo Fashion Week, São Paulo, Brazil

Intern responsible for designing, coding, and producing a tensegrity light sculpture.

 $04/2015 \rightarrow 02/2016$

Ekoa Park

Ecological Park

Morretes, Brazil

Supervised intern in charge of detailing the project.