Marco Juliani

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Web: https://m-juliani.github.io/portfolio/

Github: https://github.com/M-JULIANI
Nationality: Ecuador / USA
Languages: English / Spanish

Summary: Growth-minded creative interested in data-driven approaches to problem solving. Looking for opportunities to leverage design and technology.

WORK EXPERIENCE

10/2022 – current (remote)
Outer Labs
Title: Senior Software Engineer
Prev: Software Engineer (1yr)

- Tech lead on a team developing a space planning web application.
- Contributed to critical libraries used in the web application related to rendering, state management, spatial algorithms, and geometric operations.
- Developed important features across the stack.

04/2021 – 10/2022 (London, UK)
KOPE / matterlab
Title: Software Developer & Product Owner

- Led the development and client engagement to deliver a modular building configurator implementing complex adjacency and stacking rulesets specific to the client's proprietary system.
- Algorithm development and general implementation during strategic pilot engagements with clients related to building enclosure systems and their strategies.
- Mentored younger engineers on best practices and design patterns.

02/2020 – 04/2021 (London, UK)
CallisonRTKL
Title: Associate Computational Design Specialist

- Developed custom plugins for Rhino + Grasshopper relating to the analysis and feasibility of building forms.
- Developed parametric tooling for the analysis and viability of an outdoor commercial development which needed the roof to have a number of performance criteria.
- Implemented a logging system for tracking usage of our internal tooling initiates across the firm.

10/2019 – 01/2020 (London, UK)
Front Inc
Title: Architectural/Computational Technician Intern

- Worked on workflow automation and design rationalization of building enclosures across a range of projects for architects such as Foster + Partners, Renzo Piano, SO-IL, Zaha Hadid Architects.

11/2019 (London, UK)
Bartlett School of Architecture
Title: Workshop Tutor for AD Research Cluster 9

- Taught a 3-day introductory workshop on Unity and C# fundamentals to RC9 students.

12/2018-07/2019 (Boston, MA)
Gensler
Title: Job Captain / Digital Design Contributor

02/2014-11/2018 (SF & NYC)
Woods Bagot
Title: Junior Architect

- Trained colleagues on best software practices and data modeling methods to solve problems.
- Contributed to the 'growth' culture by sharing victories/lessons learned on internal channels and encouraging others to do the same.
- Initiated an internal lecture series where we invited guest speakers across NYC to speak about their work.

SKILLS

Javascript / Typescript	C#	Unity
HTML / CSS	Java	Rhino / Grasshopper
Canvas API	Postgres	Dynamo / Revit
React	GCP	Data structures
Three.js / R3F	Git	Spatial algorithms
Node / NPM	Gitlab	Design patterns
	Azure DevOps	

EDUCATION

09/2018 – 09/2019 (London, UK)
University College London
Master of Science in Architectural Computation
(Grade: Distinction)

Computer-science-for-architects program where we
- learned object-oriented-programming,
- familiarized ourselves with Visual Studio and Git,
- leveraged Unity and C# as a prototyping and simulation environment, and
- implemented vanilla L-Systems, Genetic Algorithms, Kohonen Nets, Artificial Neural Networks, Octrees.

08/2008 – 05/2013 (Tucson, AZ)
University of Arizona
Bachelor of Architecture – Minor in Business

INVOLVEMENT

10/2020 (remote)
Acadia 2020 - Hypar Workshop

- Introduced to Hypar functions in C# and Grasshopper.
- Learned how to unit test C# functions locally, and then built integrated workflows collaboratively in teams.

07/2014 (Hong Kong)
Smartgeometry 2014 Workshop / Conference

- One of four Woods Bagot employees selected to attend this international design technology workshop and conference.
- Participated in the HK Smartowers cluster where we used custom workflow tools in Grasshopper (Elefront) to integrate light-weight BIM functionality in the Rhino + GH environment.