Marco Juliani				
[portfolio](#)	[gmail](#)	[github](#)	[twitter](#)	[linkedin](#)

Growth-minded learner interested in data-driven approaches to problem solving.

5 years software development experience. 5 years working in architecture project delivery + CAD + geometric modeling.

Domains + technologies of interest: solvers, optimization, data visualization, CRDTs, full-stack development, embeddings, llm agents, search algorithms, geospatial, space-planning.

Work & Education

10/2022 - current	NY	Senior Software Engineer	[Outer Labs](#)
04/2021 - 10/2022	London	Software Developer	[KOPE](#)
02/2020 - 04/2021	London	Computational Design Specialist	[CallisonRTKL](#)
09/2019 - 01/2020	London	Facade Consultant	[Front Inc](#)
09/2018 - 05/2019	London	MSc Architectural Computation	[UCL Bartlett](#)
11/2017 - 08/2018	Boston	Job Captain	[Gensler](#)
02/2014 - 11/2017	SF	Junior Designer	[Woods Bagot](#)
08/2008 - 05/2013	Tucson	Bachelor's of Architecture	[University of Arizona](#)

Skills

Frontend	Javascript, Typescript, React, HTML, CSS, MUI, Tailwind
Rendering + Browser	Canvas API, Three.js, R3F, Pixi.js, Canvas-Sketch, Chrome API
Maps + Geospatial	Mapbox, Google Maps Platform, PostGIS
API + Scripting	Node.js, Express.js, Nest.js, Python, Flask, Go, C#, GraphQL
Database + ORM + Object Storage	Postgres, Firebase, Firestore, GCS, MySQL, IndexDB, TypeORM, Drizzle, Yjs, Liveblocks
DevOps + Infrastructure	Gitlab, Azure DevOps, Github, GCP, AWS, Docker
Product Lifecycle	Agile, TDDs, Docusaurus, Slack, GSuite, Linear, Notion
Data	Data Models, Mermaid, Ingestion Pipelines, DuckDB
LLMs & ML	RAG, Function-Calling, Haystack, LLama-Index, Pytorch, Numpy
Algorithms	GAs, L-Systems, Kohonen Nets, Neural Nets, Octrees
Computational Design	Rhinoceros, Grasshopper, Revit, Dynamo, Unity

Involvement

08/2024	[Competition](#)	Untabbed: *Gemini API Developer Competition*
04/2021	[Publication](#)	Rumoer 76: voxel-based building + apartment generator mentioned in *Generative Design With Hypar* article (pg. 43).
05/2020	[iOS game](#)	Grid-locked: foray into game development during lockdown
04/2020	[Talk](#)	Data Management & Display: *Elefront* and *Human UI*
01/2020	[Plugin](#)	PlanBee for Grasshopper: cell-based spatial analysis plugin.
08/2019	[Tutoring](#)	Bartlett: *Introduction to Programming* Workshop ([1](#)) ([2](#))