

Jacob Jörgens

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Education

Bachelor's Degree in Physics from the University of Chicago October 2017-June 2021

Experience

Joergens Design, LLC (joergens.design) New York, New York
Founder August 2024-Current

- Built a business around a 3D parametric jewelry configurator I developed for novel customization

Freelance Projects, Computational Designer February 2023-Current

- Created model for architecture firm, SOM, to optimize gridshells towards stress-curvature alignment
- Developed a tool to explore the optimal floor plan layouts of a mass timber building typology
- Coded an AR experience with Austin Creative Tech for a retail clothing company

The University of Chicago Chicago, Illinois
Researcher June 2018-February 2023

- Redesigned the ICOS instrument in Prof. Moyer's atmospheric physics group to study cloud formation
- Identified underlying physics failures in the BEAM carbon emulator for social cost of carbon research
- Pushed commercialization of non-axial ICOS technology with Ben Clouser via NSF I-Corps

57th Street Design (57stdesign.com) Chicago, Illinois
Computational Modeler and Carpenter March-October 2021

- Coded a parametric model of a mass timber building typology in ghPython/Rhino
- Prototyped a mass timber floor-cassette module and built hundreds of furniture pieces by hand

Environmental Research Group (enviroresearchgroup.github.io/erg) Chicago, Illinois
Board Member/Steering Committee September 2018-June 2021

- Led a team to create building energy, air quality, and agent-based traffic models with open-source data

Uncommissioned Design Chicago, Illinois
Co-Founder January 2019-September 2020

- Awarded \$10K grant through the Polsky Accelerator to develop parametric furniture design startup

Watchtower Robotics Boston, Massachusetts
Engineer June-September 2019

- Designed parts and processes for soft-robots built to map municipal water pipes and inspect leaks
- Built a 3D gel-suspension printer at the Autodesk Technology Center

Vertical Farming New York, New York
Engineer/Farmer July 2016-September 2017

- Engineered automated sensors using IoT devices for Verticulture and Farm.One (www.farm.one)
- Designed and built a fully-automated aeroponic green wall for a kindergarten classroom in NYC

Skills

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| Software/Hardware | Rhino, Grasshopper, Fusion360, Eagle, ESP32, RaspberryPi |
| Programming | Python, C, Java, R, HTML/CSS, Three.js, Next.js, AWS, React |
| Interesting Side Jobs | Landscaper at Highview Creations, Cheesemonger at Rubiner's, Playground Designer/Builder at Common Worlds, Furniture Designer/Builder, Cook at Quartier Libre jazz bar, Cancer Researcher at MSKCC (https://doi.org/10.1084/jem.20150524) |
| Languages | German, Intermediate French |