

JONAS

Full-Stack Engineer
5+ years shipping TypeScript & Python products from prototype to production.
4x hackathon prize-winner.
AEC-tech & sustainability across CH, DE, BE, DK.

Info

Jonas Ward, Van den Bulcke
IR arch. MAS ETH
Swiss B-permit (EU-citizen), Belgian, Brazilian

Mühlehalde 11, 8032, Zürich, Switzerland
+41 76 232 76 27
jonas@jonasward.ch

jonasward.ch - link
github.com/jonasward - link
linkedin.com/in/wardjonas - link

Education

ETH Zürich - Zürich, Switzerland
2018 - 2019 - Master of Advanced Studies in Digital Fabrication

TUM - Munich, Germany
2014 - 2015 - Master of Science in Architecture and Urban Design

UGent - Ghent, Belgium
2010 - 2015 - Master of Science in Architecture and Engineering

Skills

soft

languages
Dutch C2, English C2, German C1, French B2

programming languages

primary
TypeScript / JS (5+ yrs), Python (4+ yrs)

secondary
C# (3+ yrs), wasm (C#, rust), java

frontend

react
React, Next.js, zustand, redux, react-router

3D / WebGL
Three.js / R3F, babylon.js, GLSL shaders, pixi.js

styling
Tailwind, CSS / SCSS, MUI, antd

backend

server
bun / Elysia, express, flask / django, springboot

cloud
AWS, Google Cloud, Azure, Docker, kubernetes

database
mongodb, supabase, prisma, mysql

data & ML

ML
pytorch, tensorflow, sklearn, openCV, pandas

spatial
GDAL, GeoPandas, shapely, QGIS

design

tools
Figma, Rhino / Grasshopper, Blender, InDesign

Experience

circrete - Copenhagen, Denmark (Remote) - May 2025 - now

Advisory Board Member - Tech Strategy

circretes Digital Toolchain
Advising Copenhagen-based concrete-reuse start-up on technical strategy and data-pipeline architecture.

design-to-production - Zürich, Switzerland - April 2022 - now

Consultant - FullStack Developer

Holzvision Max - link
Sole engineer on MES platform for Switzerland's national timber showcase ESAF 2025

Rewe co-co - link
Frontend on Red Dot Award-winning supermarket & vertical-farming configurator (TypeScript/React, .Net, Google Cloud).

Stauffer Statics - link
Sole engineer: built and deployed cloud structural analysis tool for timber contractors (TypeScript, Google Cloud).

Haas House Configurator - link
Sole engineer: shipped browser-based 2D/3D house configurator from first commit to AWS production.

UGD - Konstanz, Germany - March 2020 - March 2022

Consultant - POC & Software Development

Haworth CoDesigner
Delivered evolutionary-algorithm space planner for Haworth — 2D CAD kernel (JTS), space syntax algorithms, IR sensor integration. Hosted on Azure.

Alcubond Facademaker - link
Shipped live 3D facade paneliser for Alucobond's CNC panels.

rreefs - Zürich, Switzerland - September 2019 - 2022

Consultant - Design and Fabrication Strategy

Modules - link
Engineered Hochparterre Goldener Hase 2021-winning 3D-printed clay reef modules — funded by WeMakeIt & ETH Library Lab. Permanent installation in San Andrea, Colombia.

clay-online - link
Shipped browser-based reef module configurator (babylon.js).

Jonas Ward - Ghent, BE; Zürich, CH - 2013 - now

self-employed - Design & Engineering

Lucerna Lecto - link
2024 - 2025 — Shipped browser-based SDF lamp configurator (R3F); multiple production releases.

Elbe Bienen - link
2019 — Designed Flemish-government-funded sensor-driven beehive for Brussels-based artist Anne-marie Maes.

Extra Curricular

AEC Hackathon - Copenhagen 2026 - link
Prize: Best Solves a Big Problem — reuse platform with partial AI integration.

Green Tech Hackathon - Zürich 2025
Built grid carbon intensity load balancer for scheduled jobs (cron / serverless).

AEC Hackathon - Copenhagen 2025 - link
Prize: Best Mashup — built AEC Flow, a data-vis UI POC for complex architectural datasets.

AEC Hackathon - Zürich 2025
Prize: Most Potential for Start-Up — built Projects Talking, a CAM / ERP tool for the timber industry.

url-safe-bitpacking - link
2024 — Published open-source URL-safe bitpacking library for complex parametric models.

AEC Hackathon - Copenhagen 2024
Prize: Innovation — built Open Detail, an open LCA architectural detail database.

AEC Hackathon - Zürich 2024 - link
Built Santini at Home — a parametric lamp configurator.

open3D
2023 — Contributed geometry algorithms to an open-source TypeScript 3D library (Rhinoceros 3D API).