

Meqdad (Kian) Feizbahr

Computational Design Engineer

Rhino/Grasshopper · C#/.NET · Three.js

Tehran, Iran · open to relocation

meqdad.feizbahr@gmail.com · WhatsApp & Telegram @kfeizbahr

feizbahr.com · github.com/kianarc

linkedin.com/in/meqdad-feizbahr-330a39141

Architect (M.Eng.) turned software engineer who builds the tools designers work in. Nearly two decades of architecture and furniture design, and seven years writing computational design software for the furniture and interior industry — RhinoCommon/Grasshopper plugins, parametric product models and CNC-ready manufacturing output, and his own parametric CAD application on OpenCASCADE. Comfortable owning a product end to end: talking to designers, choosing the architecture, and shipping.

EXPERIENCE

Interior Designer → Software Developer — Philpa (office furniture), Tehran Apr 2021 – present

- Joined as an interior designer; identified the weak points in the design-to-sales-to-production chain — slow, error-prone, retyped hand-offs — and moved the design department from AutoCAD to Rhino.
- On my own, built BOND for Philpa: a Rhino/Grasshopper plugin in C# with a WPF interface — 22 Grasshopper components and 13 Rhino commands covering parametric dynamic blocks, automated drawing sheets and technical analysis, inventory and CNC-ready output for panel-processing machines.
- A product is modelled once, parametrically; the plugin produces its drawings, analysis and parts data, so nothing is retyped between design, sales and production. Used daily by 8 designers.

C# · .NET · RhinoCommon · Grasshopper SDK · WPF · MongoDB

Founder & Developer — Atrium (parametric CAD), Tehran 2026 – present

- Building a desktop parametric CAD application for furniture, cabinetry and interior architecture that combines part modelling (SolidWorks), family hierarchies (Revit) and dynamic components (SketchUp) in one tool.
- Manufacturing-aware data model — Material → Tool → Process → Part → Assembly → Plan — so drilling, edge banding and pocketing live in the model rather than in drawings.
- Wrote a formula engine with dependency tracking and circular-reference detection, a custom OCCT viewport and gizmo, and a PBR material system; currently in pilot at Philpa with production data.

Python · PyQt5 · OpenCASCADE (pythonocc) · SQLAlchemy · SQLite/PostgreSQL

Interior Designer & Software Developer — Sahlan (office furniture), Tehran Nov 2019 – Mar 2021

- Asked to evaluate a move to Revit; recommended SketchUp instead and led the switch, which became the company's primary design tool.
- Modelled the product range as parametric dynamic components and wrote a SketchUp plugin (Ruby, HTML/JS) connecting designs to the CRM — still used daily by 4 designers.

Architect & Interior Designer — freelance and in-house 2007 – present

- Designed 80+ villas, apartment buildings and residential and office interiors, from concept to construction documents.
- Boom Tarhe Mana (2018–19): site subdivision and villa design for a residential complex using Revit worksharing.
- Part Tajhiz-e-Payam (2015–18): office furniture and interiors in MDF panel construction — the manufacturing knowledge behind BOND.

Instructor, architectural software — Tehran Fonun, Narsis, Kakh-e-Danesh, NikZi 2011 – present

- Taught Revit, Rhino, SketchUp, AutoCAD, 3ds Max and V-Ray to architecture students and professionals; recorded video courses for NikZi.

OPEN SOURCE

QuickGH — Rhino plugin that runs Grasshopper definitions headlessly: pass inputs, get outputs, without opening the file. github.com/kianarc/QuickGH

InputPlus — Grasshopper plugin for storing and retrieving geometry, with an in-canvas “wallet” and JSON import/export. github.com/kianarc/InputPlus

AlphabetSequence — zero-dependency C# library for Excel-style sequences (A ... Z, AA ...): navigation, comparison, number conversion. github.com/kianarc/AlphabetSequence

SKILLS

Computational design	RhinoCommon, Grasshopper SDK, parametric product modelling, OpenCASCADE, CSG and mesh geometry, CNC output
Languages	C#, Python, JavaScript, Ruby, SQL
Backend & data	ASP.NET Core, EF Core, PostgreSQL, MongoDB, SQLite, SQLAlchemy, S3/MinIO
Front end & 3D	React, Three.js, WPF, PyQt5
Design tools	Rhino, Revit, ArchiCAD, SketchUp, AutoCAD, 3ds Max, V-Ray, Photoshop
Languages spoken	Persian (native), English (professional working proficiency — TOEFL iBT 100)

EDUCATION

M.Eng. Architecture — Islamic Azad University, Chalous · 2013–2016

Thesis: green architecture for a nursing home

B.Eng. Architecture — Mahestan-e-Sabz-e-Shomal, Tonekabon · 2007–2010

Higher National Diploma, Architecture — Deylaman Institute, Lahijan · 2005–2007

CONFERENCE PAPERS

“Parametric Design Optimization for Sustainable Architecture” — 5th Int. Conf. on Advances in Civil, Architecture and Environmental Engineering, Kuala Lumpur, 2018

“Analysis of BIM Data for Efficiency Improvements” — Int. Congress on Recent Innovations in Engineering, Science and Technology, Istanbul, 2019

TESTS

GRE General — Quantitative 168 (83rd percentile), Verbal 153 · 2025

TOEFL iBT — 100 / 120 (Reading 28, Listening 28) · 2024

Open to relocation within Europe and beyond; requires visa sponsorship.