

Daniel Madeley

Email: daniel.c.madeley@gmail.com
LinkedIn: <https://dub.sh/linkedin-madeley>
Github: <https://dub.sh/github-madeley>
Mobile: +44 7919587870

Summary

Structural Engineer with four years' UK experience in structural analysis, design verification, and BIM coordination. Proficient in Eurocodes and UK standards, with hands-on experience in steel, masonry, and reinforced concrete structures. Skilled in fast-paced, multidisciplinary projects with exposure to international codes and multi-jurisdictional designs. Experienced in automating workflows using Python and Grasshopper. Project experience spans high-end residential, advanced motorsport, defence, and industrial sectors.

Skills

Codes & Standards: Eurocodes, UK National Annexes, BS / EN standards

Materials: Steel, Masonry, RC, Timber

Structural Analysis & Design: Tekla Structural Designer, SCIA, StatiCa

Engineering Calculations & Verifications: Tedds, Masterseries, Hilti Profis

BIM, 3D Modelling & Coordination: Revit (Structure), Rhino, FreeCAD

Drafting, Detailing & Technical Review: AutoCAD, Bluebeam

Automation, Parametric Design & Data: Python (workflow automation), Grasshopper (parametric modelling)

Professional Experience

Structural Engineer

Ridge, Oxford

2025 – ongoing

Lead Structural Engineer delivering high-value projects (£25–115M) in advanced motorsport, industrial, and defence sectors. Led full-cycle structural analysis, design verification, and coordination with multidisciplinary teams, overseeing BIM workflows, technical drawings, and calculations to ensure constructability and compliance with international standards. Mentored junior engineers and enhanced efficiency through automation using Python and Grasshopper.

Structural Engineer

OCSC, London

2024 – 2025

Designed reinforced concrete residential structures for major London developers (Berkeley Group, Barratt, Clarion Housing Group). Conducted calculations, design checks, and technical reviews in line with Eurocodes and UK National Annexes, while coordinating with architects, MEP teams, and contractors. Gained client-facing and construction stage experience.

Graduate Structural Engineer

Austin Partnership, Cardiff

2022 – 2024

Designed single-dwelling and small multi-storey residential projects (up to five storeys), gaining experience in analysis, detailing, and engineering calculations. Assisted with BIM modelling, drawing production, and multidisciplinary coordination, building foundational knowledge in Eurocodes, UK standards, and material-specific design (RC, steel, timber).

Featured Projects

F1 Design Projects

Advanced Motorsport

Performed back analysis of Formula One design facilities for Ferrari, Cadillac, and Williams, including portal and truss-based frames on pad or piled foundations. Retrofitted warehouses into design offices with new roofs and PV panels, strengthening critical connections.

Fugro

Industrial Office Facility

Conducted back analysis of a curved steel portal frame, including design and verification of piled foundations and connections to ensure structural integrity.

Kidbrooke Village

Residential Tower Blocks 9-16 Storeys (341 Homes)

Designed reinforced concrete structures, including flat slabs, columns, and pile foundations. Managed the design process from Stage 2 to Stage 4, coordinating with architects, MEP teams, and contractors.

Sheerwood

Residential Tower Blocks 11-20 Storeys (200 Homes)

Designed reinforced concrete structures with flat slabs, columns, and pile foundations. Oversaw the design progression from Stage 2 to Stage 3, ensuring compliance with Eurocodes and constructability standards.

Education

Degree

BEng Civil Engineering (2:1)

(2019 – 2022)

Leeds Beckett University

Structural Analysis, Computational Design, Material Science, Statics, Continuum Mechanics, FEA.

Professional Development:

Engineering Skills (FEA)

Additional: DataCamp (Data Science)