

FABIANO DE SÁ MIRANDA

SENIOR FITNESS EQUIPMENT DESIGNER

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Nationality: Brazilian
Upwork Profile: Fabiano Miranda
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Mechanical Designer specializing in the design and development of commercial, home, and professional fitness equipment, with over 10 years of experience working with global brands across the USA, UK, Australia, Brazil, China, Croatia, and Thailand. Strong expertise in strength training machines, racks, benches, cable systems, and heavy-duty welded structures, delivering manufacturing-ready CAD models, technical drawings, BOMs, renders, file conversions, and complete assembly documentation. Proven experience collaborating with international teams, suppliers, and production environments.

CORE SKILLS & EXPERTISE

- Mechanical design of commercial, home, and professional fitness equipment.
- Strength training machines, racks, benches, cable systems, and attachments.
- Sheet metal design, welded structures, and load-bearing frames.
- DFM / DFA (Design for Manufacturing & Assembly).
- Production-ready CAD modeling for manufacturing and prototyping.
- Assembly documentation, exploded views, and BOMs.
- Manufacturing feasibility analysis and supplier-ready documentation.
- Product visualization, rendering, and animations.
- CAD file conversion (ECDesign, FloorPlanner, Shopify).

TECHNICAL TOOLS

- SolidWorks, CATIA, Inventor - Advanced (assemblies, technical drawings, sheet metal, weldments, surface modeling)
- KeyShot - Product rendering and animations
- Adobe Photoshop - Image editing and presentation assets
- CorelDRAW - Technical documentation, layout, and visual assets
- 3ds Max — CAD and 3D file conversion for ECDesign, FloorPlanner, and Shopify
- Wix, Shopify, SEO, Google Ads, and Meta Ads - Website creation, product pages, landing pages, basic e-commerce setup, online visibility, and digital advertising.

EDUCATION

Technical Diploma in Mechatronics – Industrial Area
Colégio UMCTEC – Mogi — Brazil
Completed: 2nd semester of 2009
Diploma awarded: February 4, 2010

TECHNICAL CERTIFICATIONS & ENGINEERING TRAINING

- DFA/DFM - Design for Assembly / Design for Manufacturing | Setec Consulting Group - February 2013
- GD&T - Geometric Dimensioning and Tolerancing | Setec Consulting Group - March 2013
- FMEA - Failure Mode and Effects Analysis | Answer Consultoria - August 2012
- Program Management Process | Modine Brazil - April 2012
- Welding Professionalization and Qualification - Technical Workshop | Delta - September 2012
  Focus: welding qualification concepts, weld symbols, and weld callouts in technical drawings.

MAIN PROFESSIONAL EXPERIENCE

Temple of Gainz – USA | March 2026 – Present
Senior Fitness Equipment Mechanical Designer | Product Development & Supplier Coordination

- Responsible for the development and improvement of strength training equipment, including new product design, updates to existing products, and technical design revisions.
- Develops and revises CAD assemblies, technical drawings, BOMs, and manufacturing documentation for fitness equipment production.
- Supports product development through supplier communication, prototype review, manufacturing feasibility analysis, and technical feedback.
- Coordinates with international suppliers and factory teams regarding production review, assembly issues, design corrections, and manufacturing requirements.
- Participates in business visits, factory meetings, production review discussions, and technical observation related to fitness equipment manufacturing.

Bulletproof Fitness – USA | June 2023 – March 2026
Senior Fitness Equipment Mechanical Designer

- Designed and developed home gym equipment, strength training machines, attachments, and accessories from concept through manufacturing preparation.
- Delivered manufacturing-ready CAD assemblies, technical drawings, BOMs, exploded views, and visual documentation for multiple strength equipment product lines.
- Worked directly with Chinese, Vietnamese, and Indonesian manufacturers and suppliers to support product development, prototype review, production feedback, and manufacturing revisions.
- Communicated technical corrections, design updates, assembly issues, and manufacturing requirements to factory teams during the product development process.
- Developed welded steel structures, plate-loaded systems, cable-based mechanisms, adjustable handles, pulley attachments, platforms, and accessory components.
- Created and revised 3D models, production drawings, assembly documentation, and technical files to support prototyping and manufacturing.
- Worked on product improvements, design revisions, mechanical functionality, ergonomics, assembly feasibility, and manufacturing efficiency.
- Supported the development of equipment with focus on durability, usability, structural integrity, production feasibility, and customer-facing presentation.
- Projects included:
  - VTS, VTS Lite, Isolator, 3D Handles, Adjustable (3D) Handles, VTS Platform, 360 Bearing Handle, High/Low Pulley Attachment, Foldable PCD, PCD Stand-Alone, Tilting Smith, etc.

Griffin Fitness – USA | May 2021 - June 2023
Senior Fitness Equipment Mechanical Designer

- Designed and developed home gym strength equipment, accessories, attachments, and support components focused on durability, usability, and manufacturing efficiency.
- Created production-ready CAD assemblies, technical drawings, BOMs, exploded views, assembly documentation, and manufacturing files.
- Worked directly with Chinese suppliers and manufacturers to support product development, prototype review, production feedback, and design revisions.
- Developed and revised welded steel structures, rack systems, bench frames, cable systems, lever arms, monolift attachments, and accessory components.
- Created product renders, animations, and visual assets for website presentation, marketing materials, and customer-facing product pages.
- Prepared assembly manuals, product documentation, and technical instructions to support customer assembly and internal product communication.
- Developed production-ready designs for:
  - Adjustable Bench, Power Rack, Cable System, FID Bench, Lever Arm, Monolift, Flat Bench, etc.

Verve Fitness - Australia | February 2021 - July 2023 (Part-Time)
Fitness Equipment Mechanical Designer | Freelance

- Converted and optimized fitness equipment CAD/3D files for ECDesign and FloorPlanner.
- Prepared 3D models and product renders for gym layout planning, website presentation, and customer-facing product visualization.

BLKBOX – UK | February 2020 - February 2021
Fitness Equipment Mechanical Designer

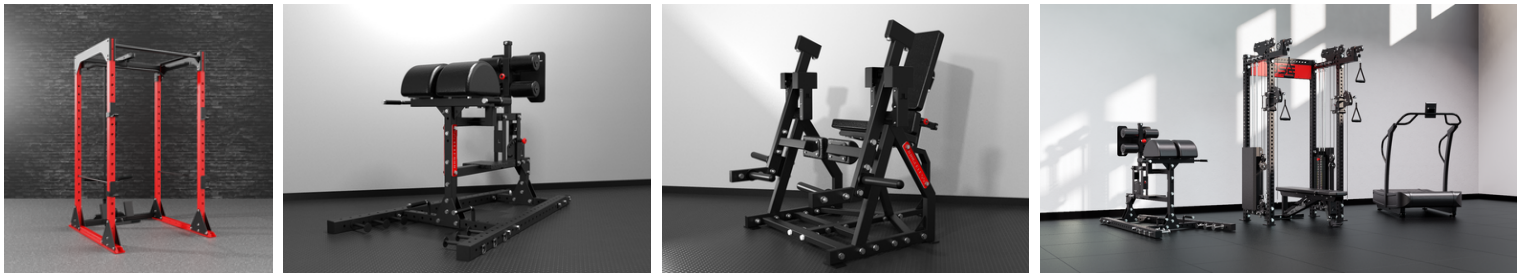
- Designed strength training equipment and home gym products, including 3D CAD models, production drawings, BOMs, and manufacturing documentation.
- Created assembly manuals, exploded views, and technical instructions for product assembly and customer support.
- Converted and optimized CAD/3D files for FloorPlanner and digital gym layout planning.
- Projects included:
  - GHD, MyoThrusta, Leg Extension, 45 Degree Hyper Extension, etc.

Bench Fitness – Thailand | June 2019 - February 2020
Fitness Equipment Mechanical Designer

- Designed commercial and home-gym strength equipment, including benches, racks, rigs, attachments, and lower-body training machines.
- Developed 3D CAD models, technical drawings, and manufacturing-ready design documentation for fitness equipment production.
- Worked on welded steel structures, equipment frames, adjustment systems, pivoting mechanisms, user-contact components, and accessory parts.
- Created product renders and visual assets for website presentation, product pages, and customer-facing visualization.
- Supported product development with design revisions focused on durability, usability, ergonomics, assembly, and manufacturing feasibility.
- Projects included:

Adjustable Bench, GHD, Leg Curl / Extension, Jammer Arms, Power Racks, Rigs, Plyobox, Back Extension, Belt Squat, Lat Pulldown, Weightlifting Platform, etc.

RENDERS



3D MODELS

