Pau Freire Cigliuti

Mechanical Engineer

5+ years designing and prototyping automated machinery, driven by curiosity and a hands-on approach to engineering. Currently focused on EOAT design, R&D, and deployment of robotic systems at **Theker Robotics**, working across the full product cycle, from CAD to manufacturing to on-site deployment, alongside mechanical, electrical, and software teams. I'm committed to applying my skills in engineering while continually giving my best effort.

Theker Robotics | 9 months.

- **Robotics Hardware Engineer** (*December 2025 — Present*)

  › Designed a multitool EOAT for universal parcel gripping, from concept to deployed product.

  › Developed an innovative gripping mechanism combining new materials and a new sensing method, improving grip, pick-quality detection, and shape estimation.

  › Ran in-house manufacturing. From CAD to 3D printing, laser cutting, sheet metal bending, and welding.

  › Worked daily with the software team on-site at MANGO. Drove picks/hour from 600 to 1,000+ and prepared for the scale-up of future robots.

Comexi Group | 2 years & 3 months.

Project Mechanical Engineer (*August 2024 — November 2025*)

› Acted as lead mechanical engineer on 10+ custom automated-machinery projects, designing non-standard components, assemblies, and mechanisms in Creo.

› Produced complete 3D models, BOMs, and 2D manufacturing drawings, coordinating with planning and procurement teams for an on-time and cost-effective delivery.

Continuous Improvement Engineer Intern (*September 2023 — August 2024*)

› Resolved recurring mechanical design issues on flexographic printing machines through root-cause analysis and corrective redesign. Built and deployed a new incident-tracking system, improving visibility and follow-through.

Autimak S.L. | 3 years & 1 month.

R&D Engineer (*May 2021 — September 2023*)

› Designed and developed custom machinery from the ground up to solve client challenges in the textile packaging sector, managing everything from initial concept to CAD, technical drawings, and electrical and pneumatic systems.

› Streamlined CAD designs on existing machines to simplify future iterations and improve manufacturability.

› Represented engineering at ITMA trade fairs (2019, 2023), supporting technical sales and client engagement.

Mechanical Assembly Technician (*May 2019 — August 2019 | May 2020 — August 2020*)

› Assembled and tested automated machinery structures, integrating electromechanical and electropneumatic systems. Also machined parts and sub-assemblies.

Education

B.Eng. in Mechanical Engineering (*2019 — 2024*)
University of Girona, Spain & **Pôle Universitaire Léonard de Vinci**, Paris.

Technological Baccalaureate Degree (*2017 — 2019*).
Institut Carles Rahola i Llorens, Spain.

Skills

3D & 2D CAD — **Fusion | PTC Creo | SolidWorks | Autodesk Inventor | AutoCAD**
Manufacturing & CAM — **Laser Cutting | Sheet Metal Bending | Welding | 3D Printing**
PLM & ERP — **SAP | Windchill**
FEA — **Abaqus | Ansys Workbench**
Programming & Software — **Python | MATLAB | Excel**

Languages

Spanish & Catalan: Native **English:** C2 (proficient in all areas)

Contact

+34 644 402 820 p4u.freire@gmail.com www.linkedin.com/in/paufreire