A Fully Open Source 3D Printed Robot Arm

BCN3D Succes Stories

ABOUT BCN3D Moveo

We are excited to present the BCN3D Moveo, an Open Source robotic arm designed and developed by our BCN3D Technologies engineers and the Departament d'Ensenyament from the Generalitat de Catalunya.

BCN3D

TECHNOLOGY TO EVERYONE

BCN3D Technologies continues to take important steps in order to achieve our goal of bringing digital manufacturing technology to everyone. On this occasion, we present to you the **BCN3D Moveo,** a robotic arm design from scratch and developed by our engineers in collaboration with the Departament d'Ensenyament from the Generalitat de Catalunya.The structure is printed entirely using additive manufacturing technology, and Arduino software controls the electronics. Our factory of BCN3D Sigma **printers** has been able to manufacture a batch for educational purposes.

OUR MOTIVATION BEHIND
THE BCN3D MOVEO

One of the concerns of the Departament d'Ensenyament is the high cost of the materials that undergraduate students must use for their internships. Therefore, an Open Source robotic arm, modifiable by the students and reproducible at low cost, could cover several of the existing training itineraries: Mechanical design, automation, industrial programming, etc.

BCN3D Technologies is part of Fundació CIM, and shares its educational vocation. That is why, when the Departament d'Ensenyament contacted us in order to suggest this project last year, we didn't hesitate in taking the opportunity. The BCN3D Moveo allows educational centres to enjoy a **modifiable** and **accessible** project with enough output for training purposes, at a price far lower than the industrial equipment they are accustomed to.

Once the robotic arm was designed and manufactured, we began the last phase of the project. This consisted of an **assembling and fine tuning workshop** for **15 institutes** around Catalonia, which took place in the BCN3D Technologies. These institutes already have the BCN3D Moveo in their classrooms and workshops, and must present practices that prove their knowledge of the equipment during the month of September.

WATCH VIDEO ▶

OPEN SOURCE TECHNOLOGY: GITHUB

As with all our developed products, the BCN3D Moveo files will be available for everyone. Thanks to the platform Github, a website where users around the world share their designs, anyone will be able to obtain all the necessary information in order to assemble their own BCN3D Moveo at home.

Thus, among the files to be uploaded to the platform, we include the **"bill of materials" (BOM)**, which details all the components needed to assemble the arm, as well as **CAD designs,** so that everyone can modify the design of BCN3D Moveo to their liking. In the same way, Github users will be able to find the **STL files** for printing the arm structure, and the **assembly manual** available in Spanish and English.

Unlike our other BCN3D Technologies products, the Moveo won't be commercialized. The project has been carried out with the aim of giving one more contribution to the community from the idea of the Departament d'Ensenyament.

Thanks to this project motivated by the Departament d'Ensenyament and developed by BCN3D Technologies, everyone will be able to fabricate their own robotic arm at home without the need for highly technical knowledge. We encourage you to make your own BCN3D Moveo and show us your results on social media using the hashtag **#BCN3DMoveo.**

Would you like to know more about 3D printing? Request a personalized demo of BCN3D printers that will help you visualize all the possibilities and capabilities.