

## ANTONIO MAROTTA



Antonio Marotta first approaches BIM during his studies at Politecnico Di Milano (Italy). He understands the needs of the digitalization of the construction sector not only from an aesthetical point of view but also from a holistic point of view to carry out extremely complicated analysis with relatively small effort.

His focus is on the design phase, in particular regarding the MEP part, that is gaining more and more importance in order to decrease the carbon footprint.

After the Degree in Building Engineering, obtained at the Politecnico di Milano (Italy), he develops his Master's Thesis related to the analysis of indoor air quality through computational fluid dynamics (CFD) simulations in the Building Engineering School of the Polytechnic University of Madrid (UPM). He proves the absence of a tool that can read digital building models and that integrates standards and protocols internationally recognized. He reaches his aim thanks to the collaboration with the Italian company Vento CFD in the context of the PhD program in Technological Innovation in Buildings of the UPM, under the supervision of Dr. Antonio Rodríguez Sánchez and Dr. César Porras-Amores.

The aim is to develop CFD simulations through the Open BIM workflow, that Antonio has known in detailed during his work experience in CYPE Software, a company that develop that must be used during the design phase of a Building project to analyze all the disciplines. The different tools read and write files in the IFC format, a standard developed by BuildingSmart International to enhance the interoperability.

Antonio is currently working for Cundall, a multi-disciplinary consultancy that uses BIM to communicate through the various disciplines. He is in the sustainability and building services team where he designs mechanical plants with extremely high energy efficiency to obtain the certifications from the sustainability ratings recognized worldwide (WELL, LEED, BREEAM).