

Text of the Interview of Matthieu LAPEYRE, CEO of Pollen Robotics (https://www.pollen-robotics.com/).

The interview is carried out by Robin Williamson of School of Robotics.

Robin Williamson (RW): Hello and welcome to everyone this is Robin Williamson here with Scuola di robotica based in Genoa, Italy and today I have the honor of being joined by Mr Matthieu Lapeyre, Co-Founder & CEO chez Pollen Robotics who is the co-founder and CEO of Pollen robotics in France. Welcome Mathieu it's very good to have you with us today.

Matthieu LAPEYRE (ML): Hello robin thanks for the invitation

RW. Now, for our followers can I ask you to introduce your company, Pollen robotics please

ML: Pollen robotics is a startup in France. We are seven people, we created the company in 2016 and we are focusing in bringing robot in your daily life. We are really passionate by the technology behind and how we can achieve such a such an endeavor.

We've made our first project and our first product: it is Reachy a full size humanoid able to manipulate object and interact with people. It is fully open source and it is made to explore how such robots can interact in your in your daily life, to assist and provide services.

RW: You said you've opted for open source for your robots. Can you explain the reasons for kind of choice?

ML: Before creating Pollen robotics we were researchers and we created Poppy, a humanoid. It was our first open source project and it had a lot of impact, unexpected impact. It was really interesting to see how our technology, just released for free, was changed and used in different ways by different people around the world. When we created Reachy we decided to keep the open source philosophy because actually people want it. A lot of clients asked us for having open source product because they are more independent and they can just focus on what they want to achieve with robot and change the detailed the little parameter they need to adapt the robot directly to their uses.

RW: You have two robots is that correct? There's Poppy and Reachy

ML: Poppy was our old robot, we did before creating Pollen Robotics, it was when we were researchers. Now poppy is still there but we are not improving the robot just uh we're not working anymore on this project.

RW: Can you give uh give our followers some examples of the applications of Reachy.

ML: Reachy is used a lot in high school and university because it's a flexible robot and it will merge with all engineering technology in one cool platform. It's really great for students to learn AI, mechatronics, software with this robot because they have access to everything and they just can focus on one aspect and modify the robot and build their own student project. Currently many universities purchased Reachy, also high school where students use it for teaching&learning, but it is also used by professional and by researchers, exploring how they can integrate robots in our daily life. There is a company working on the health care sector, exploring how to use Reachy for assistance to people with disability.

Reachy could grasp objects and help people who can't use their hands. Reachy could serve also as a distant nurse, performing simple tasks freeing the human nurses to do them. We have projects to develop more application with Reachy for instance its use in retail situations, providing services in shops.

RW: I saw the video on Reachy I saw how versatile and how multi-faceted is. It can making coffee, food, playing chess, doing a multi-working activity as a hotel receptionist. There's a multitude of different tasks that Reachy can perform.

ML: yes, for us it's really important to offer versatile robot. That video we prepared in a very short time, half a day, just to show that the potential of the robot. These activities by the robot are not the actual working application because it has to be developed to be efficient, and it will take another full year. But that is the idea, exploring the potential of the robot so anyone can get the idea, placing the robot in real environments. Right now Reachy cannot function as a hotel receptionist, but it will be able in the future.

RW: Reachy if I'm not wrong is programmed with Python. How did you come to this choice?

ML: Python is one of the most used languages, it's really simple to be learned and it's really efficient. Currently it is the mostly used language for machine learning, for us it is really a good choice for developing application. Fore the end user is beneficial of Python community libraries. Furthermore, Python is compatible with other languages.

RW: One last question. Looking to the future, what developments, what projects do you see Pollen Robotics will be involved, and Reachy?

ML: We want to developing Reachy platform, and we want to improve the robot as being more efficient, more polyvalent and more robust for long-term usages.

In the future we want to add mobility to Reachy and more grippers, different kind of hand tools because we think that we can't have one robot with one body doing different tasks. For this we need a robot with modular parts that can be changed depending on the situation: for

example the hand for making coffee is not the same hand for distributing flyers in the street. Our plan is to have a robot on which users can easily add a hand to adapt it to the application wanted. The same for locomotion.

RW: I also saw that there's a possibility to customize the clothing of Reachy which is it's pretty useful if you consider you know some companies have uniforms whereas a specific uniform is necessary.

ML:

Reachy could become very customizable according to the situation where one wants to use. Our philosophy is that Reachy could be modified by customers.

RW: Many many thanks for your time today, it's been really good to speak with you and understand more about Reachy and also Pollen Robotics. I?d like to thank you on behalf of Scuola di Robotica in Genoa.

ML: My pleasure and I would like to wish you all the best for the future.