

# 20 years of MINDSTORMS

by Anika Brandsma

images by Anika Brandsma



In 1998 the first MINDSTORMS kit was launched on the market, the RCX. The aim of this product? To inspire kids with the magical world of robotics and teach them how to build and program their own robot.

That's exactly what MINDSTORMS did for me. My MINDSTORMS story started 10 years ago when I was in high school. All my life, I have been building with LEGO® and in 2008 I convinced my dad to buy a MINDSTORMS NXT with me. From that moment on I have never stopped building robots with LEGO®.

The first robot I made was the Coffee Assistant, a machine that puts sugar in your coffee and stirs it with a spoon. Since I wanted to share my LEGO® creations with the world before taking them apart, my dad and I started our YouTube channel called "Vuurzoon". There I received a lot of nice comments from all over the world on my Coffee Assistant, and that motivated me to build more robots.

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After sharing videos on YouTube, my dad and I decided we wanted to do live demonstrations of our robots for the public, so we started joining local events with our creations. At our first event we showed our Duck and Bad Rat, which was a collaboration between me and my dad. I designed a duck that lays eggs in a nest, while the rat build by my father steals the eggs from the nest. Kids loved to see our animals move around.



Through meeting new people at the local events I became a volunteer at several robotic competitions, such as FLL and WRO. This is also the point where my hobby became an international one, since I was asked to show my robots at events all over the world, for example in Abu Dhabi and more recently in Shanghai.

When I was 18 years old I had to decide what I wanted to do after high school. This was a very easy question for me: I wanted to design robots! So I went to university to become a mechanical engineer. During my studies I kept on building with my MINDSTORMS bricks. In my spare time I also worked as a volunteer at a local robotics club, where I taught kids about building and programming their own robots with LEGO®. By teaching and challenging these kids I showed them that robots don't have to be difficult and can be a lot of fun.

At the end of 2017 I graduated as a mechanical engineer. My final project was about CACC (Cooperative Adaptive Cruise Control), a method to prevent traffic jams using communication between cars. And of course my experimental set up was built out of LEGO®. Using MINDSTORMS, I was able to make eight vehicles drive behind each other in a circle without colliding.



After graduation I started working as a mechanical engineer at an electronics and mechatronics company in the Netherlands. It was LEGO® MINDSTORMS that got me interested in technology and has made me the mechanical engineer I am right now.

Last year (2018) marked 20 years since the MINDSTORMS theme was launched, and therefore LEGO® opened a temporary exhibition on MINDSTORMS at the LEGO® House in Billund. I was invited to send one of my robots to Denmark to be part of this exhibition. This robot is a combination between LEGO® Friends and LEGO® MINDSTORMS to show the world that robotics and technology isn't just for boys.

For this robot, I took Olivia's robot lab (3933) and powered the small robots with MINDSTORMS motors to make them move. It was a great honor to be part of the 20 years of MINDSTORMS exhibition.



After many robots and many experiences I'm still full of inspiration and ideas. And I hope to inspire many kids with all my future creations.  
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