

Press Kit Swissloop Tunneling

Future of transportation

Existing conventional modes of transportation such as rail, road, water and air tend to be either relatively slow, expensive or a combination of both. Compared to the alternatives a new transportation system should be safer, faster, come at lower cost, should be more convenient, must be immune to weather, sustainably self-powering, resistant to Earthquakes and not disruptive to those along the route. In the past, many of such systems have been proposed, but unfortunately none of these have panned out.

Hyperloop is a new mode of transportation that seeks to change this paradigm. Hyperloop is a proposed futuristic mode of transportation, consisting of a sleek pod-like capsule which is levitating inside low-pressure or vacuum tubes, accelerating across the country at high speed, being inexpensive for people and goods. The technology is more sustainable than aviation and significantly faster than high-speed trains.

Swissloop is a student-led initiative with the goal of contributing to the research on and advancement of the Hyperloop technology and its application in the real world. The team designs and builds operational prototypes of transport capsules — so-called “pods” — with which they competed in the International Hyperloop Pod Competition. For five years (2015-2019), Elon Musk has challenged student teams from all over the world to build transport pods for the Hyperloop competition. In 2019, the Swissloop pod reached a top speed of 252 km/h and placed second at the SpaceX Hyperloop Competition. Moreover, the Swissloop team received the Innovation Award for its self-developed linear motor.

Swissloop Tunneling Project Description

Seeing how far Hyperloop concepts have been developed, Musk’s vision of high speed transportation through (Hyper)loop tunnels reached another level. In 2020, Elon Musk’s Boring Company announced that they will organize its first “Not-A-Boring-Competition” in summer 2021, aiming to bring together the best university teams to compete in building the fastest tunnel boring robot in the world and beating the snail. The background to the competition is obvious. The Boring Company wants to be able to drill tunnels for Elon Musk’s ambitious (Hyper)loop project as quickly as possible. This must be done at the highest possible speed to keep costs down. This is the only way to build a complex hyperloop network economically.

We are the new student team of ETH Zürich to compete in Elon Musk’s Not-A-Boring-Competition. The team was founded in 2020 and brings together over 40

students with expertise in mechanical- and electrical engineering as well as various business-related fields. Our team draws on the experience of the SpaceX Hyperloop Competition and consists of former members of the Swissloop Team of 2018/19, which ranked second place and received the Innovation Award. Our goal is to make tunneling faster, more sustainable and more efficient.

Not-A-Boring-Competition

The Boring Company strives to drill tunnels for Elon Musk's ambitious (Hyper)loop project as quickly as possible. This must be done at the highest possible speed to keep costs down. This is the only way to build a complex hyperloop network economically. The goal of the Not-A-Boring-Competition is to beat Gary the snail. Gary has a top speed of 1 cm/s, which will be our target. This maximum speed is also the average speed the machine will be digging, producing the liner and moving forward.

Swissloop Tunneling is one of the Digging Dozens that advanced to the final stage of the Not-A-Boring-Competition! Out of nearly 400 applicants, we are one of twelve teams that passed the technical design reviews. Our team is among the top ~3% of applicants worldwide, and we are invited to build our robot and compete at the 2021 Not-a-Boring Competition.

Contact:

If you have any media related questions or are interested in an interview, please contact us at: info@swisslooptunneling.ch