REPORT ON TECHFEST MUNICH 2018 (PIONEER FESTIVAL)

PP10 MakerSpace Garching

Interreg
CENTRAL EUROPE
European Union
European Regional
Development Fund
FabLabNet

1. TechFest Munich

1.1. TechFest Munich - Pioneer Festival

Tech Fest is Munich's biggest technology festival where hackers, tech talents, start-ups and artists from all over the world come together to work on challenges provided by established and renowned corporate partners. With the whole network and infrastructure — AND THROUGH THAT THE CHANCE OF MEETING POTENTIAL INVESTORS/BUSINESS ANGELS — already provided at a high level at UnternehmerTUM's Tech Fest it was decided to change the D.T2.3.5 venue form Pioneer Festival to Tech Fest in Garching.

1.2. TechFest

Tech Fest is a place where tech talents, start-ups, hackers and artists are invited to work together in interdisciplinary teams. Developing sustainable and responsible innovation is one of the set goals of Tech Fest. The participants will work on one of the three specified thematic areas or tracks (see figure 1).

THE TRACKS
START CREATING IN ONE OF THIS YEAR'S TECHNOLOGY TRACKS

TRACK 1
THE SMART AUTOMATION WAVE

Inspired by Industrie 4.0, Internet of things or Blockchain?
Put no limits to your creativity in this track.

TRACK 2
QUANTIFIED EARTH AND SPACE

Eager to work with Drones, Geo-Information or Object Recognition? Picking this track we offer you everything you need.

TRACK 3
FUTURE MOBILITY AND TRANSPORT

Are you interested in Autonomous Driving, Electro Mobility, Intelligent Vehicles? Then this is the right track to choose.

TRACK 4
FLEXIBLE TRACK

Flexible sensor technologies and a wide creative scope heavily attract your attention? Let your wildest visions become alive in this track.
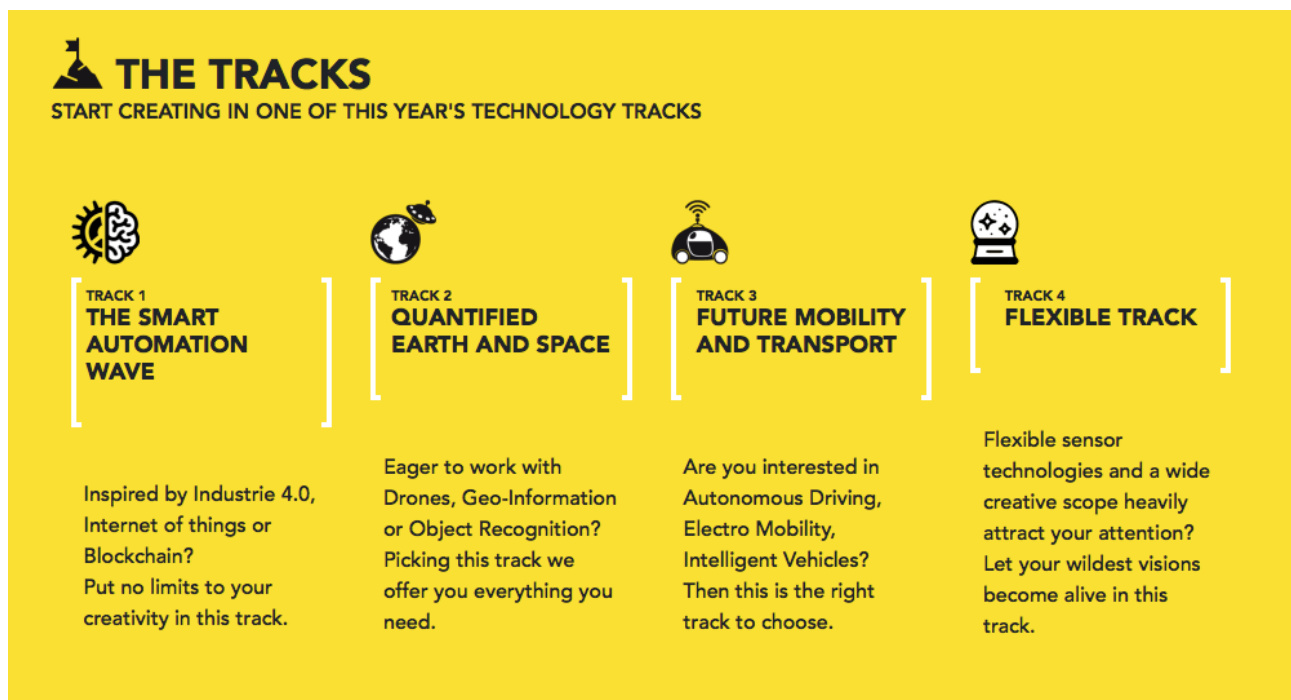
Figure 1: Tech Fest Munich 2018 Tracks

The Smart Automation track was supported by established partners like Siemens (IoT enabled beverage production), Stihl (smart support-tools) and Hawe (intelligent and autonomous hydraulic system).

Other partners offered brand new technology for the participants to work on e.g. Osram (LIGHTELLIGENCE platform), Rhode & Schwaz (Sky Protector for drones) and SWM (data driven, sustainable smart city solution).

In the Future Mobility and Transport track the participants where challenged by Audi (urban mobility service), Magna (sensors and actuators) and Knorr Bremse (enhance advisory algorithms for autonomous rail transport).

The Start-Up competition gives already established teams the chance to work on new features and ideas that are related to one of the tracks with the Intellectual Property rights remaining within the start-up company (see figure 2).

Figure 2: Benefits Start-Ups

The winners of the FabLab Business Event have the possibility of either working and furthering their ideas through the Start-Up competition or entering Tech Fest as individual participants forming teams in Munich and working on one of the provided challenges applying the latest technology (see figure 3).

Figure 3: Tech Fest Technology

For the first time Tech Fest is inviting the best teams to take part in the so-called "Launchpad Day". The aim is to create more sustainability by rewarding the best ideas with long-term support through providing a platform where senior managers and UnternehmerTUM coaches (Europe's largest center for innovation and business creation) work hand in hand with the start-ups on exploring possibilities of corporation or funding opportunities.
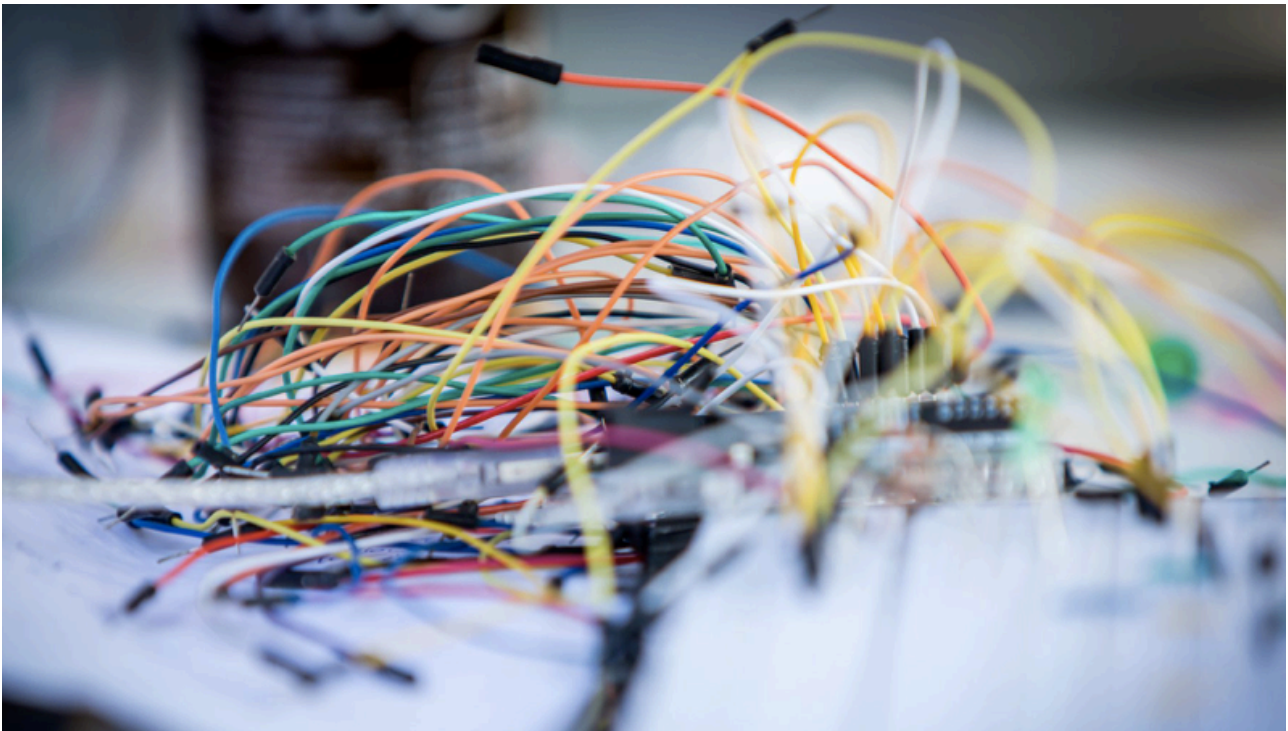
Figure 4: Tech Fest: an Overview

Figure 5: Prototyping

1.3. TechFest - Agenda

The following picture will give you an overview of the Tech Fest agenda (figure 6).

Figure 6: Tech Fest Agenda June, 14th – June, 18th

1.4. TechFest – Launchpad Day

The following picture will give you an overview of the Tech Fest Launchpad Day agenda (figure 7).

Figure 7: Tech Fest Launchpad Day Agenda June, 18th

2. Invited Start-Ups from FabLabNet

The most advanced and promising start-ups from the Pilot 2 coaching were selected to participate in Tech Fest. As some of the winning projects were represented by inventors under the age of 18, their participation at Tech Fest had to be cancelled due to legal reasons. Finally, two start-ups were selected to participate in the event in Garching.

2.1. Rapitag

Rapitag provides a smart anti-theft service, combining Retail 4.0 and so-called "rapitape". This works on the principle of AmazonGo, where it also secures theft-imposed goods and allows the customer to pay directly via an app, after which the security band on the product opens and the customer can self check-out without having to queue. Other possible operating ranges could be e-commerce and logistics.

2.2. Orthophonics

Orthophonics is the first vertical smart solution that transforms every building into a farm. Orthophonics developed a modular and reticular system to grow vegetables on vertical surfaces. The cultivation is completely automated, from sowing to harvesting. Wireless sensors allow monitoring the growth of the plants and a robotic arm harvests and replaces the plant and therefore removes the need of human maintenance.

Figure 8: Teamwork at Tech Fest

Figure 9: Wobble Touch: Winning Team Tech Fest 2018