

# The Maker's Guide to Central Europe



9

## Top 9 fablabs to visit Fablab MUSE, Trento Italy

- Happy Lab, Viena Austria
- FabLab Budapest Hungary
- StrojLab, Viena Czech Republic
- FabLab Bielsko-Biała
  Poland
- RogLab, Ljubljana Slovenia
- FabLab Bratislava
  Slovakia
- FabLab Zagreb
  Croatia
- **UnternehmerTUM MakerSpace, Munich 9** Germany



### About FabLabNet

At once daring and tame, raw and refined, digital and analogue, the FabLabNet is a world unto itself. From Alpine maker etiquette to flatland digital transgressions, the Central European belt of fablabs brings together the best of East, West, North and South.

Dear Traveller, you are very kindly invited to put on a smile, project some positive attitude and start exploring the proverbial richness of this creative matrix that spans from Trento to Bielsko-Biała on the East-West axis and from Vienna to Zagreb on the North-South.

Helping you find your way around, this is a handy yet comprehensive guide that includes plenty of engaging photos, all necessary maps, top things-to-do suggestions, bargain tips, and basic information on the main attractions. The guide is spiced with special maker community humour, as well as local digital culture exaggerations and (post-)industrial heritage anecdotes.

Supported by the mighty Interreg Central European Programme, this

booklet brings together, for the first time in such free-spirited fashion, the most exciting fablabs from the Central European region, connecting larger and smaller cities in an entirely non-discriminatory way.

Dive into the deep pools of sexy machines, crates of handy tools, hard-working hardware, soft-running software, endless streaming, short video forms, diverse communities of geeks, formal and informal networks, and, last but not least, remarkable coffee machines.

We'll help you discover the similarities and the differences between all the featured countries, particularly the ones you might think are one and the same - like Slovenia and Slovakia. We'll help navigate the synergic love affairs and

abysses of culture shock that pop up between the fablabs in the lalaland of communication.

Moreover, we will shock you with inspirational stories, where the only component that might be missing is you and your own unique contribution. Indeed, one of the most amazing things about this guide is the discovery that you, the reader, can now join this magnificent group of heroic pioneers!

Web fablabnet.net

So join us!

Join the Lonely Labnet!

Join the FabLabNet





## FabLab MUSE Italy

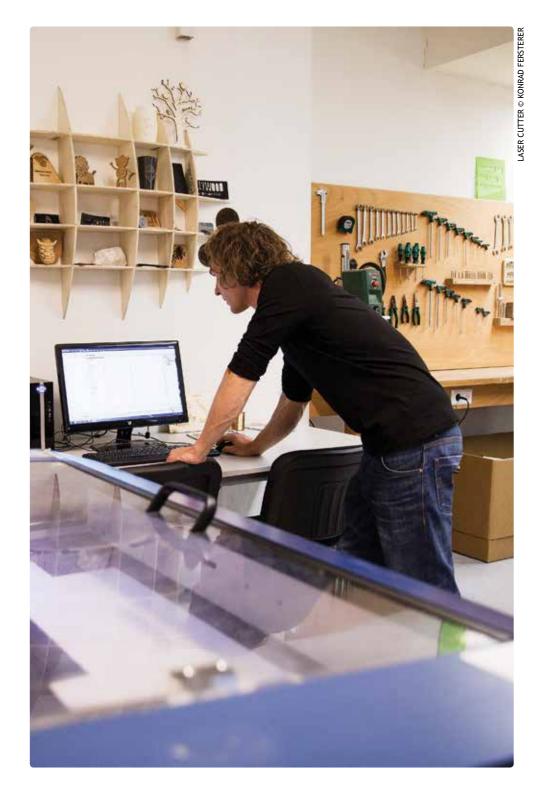




Located inside a science museum, MUSE FabLab is a place where innovation is experienced both through human history and through natural history.

**Best Achievement 12,500 students** from 500 schools have worked in this lab. Atmosphere An open workshop inside a crowded science museum. Children They are encouraged to "learn how to learn things" collectively rather than merely "know things" individually. Weights & Measures Some of the staff weigh and measure too much, despite all the deep breathing they do in the museum yoga class. **Identity issues** In-depth audience research shows that the lab sticks in people's minds. Cool neighbour Located next door and very much worth a visit is Palazzo delle Albere. the residence of the bishop-princess of Trento since the 16th century AC. Address Corso del Lavoro e della Scienza 3, 38123 Trento Web fablab.muse.it

Arkslash Educational kit used in Esom Courses to Train Teachers in Designing Computational Thinking activities. CC by Muse Fablab  $\leftarrow$  Soil Sensor kit Developed During "Ruralhack" Fabcity





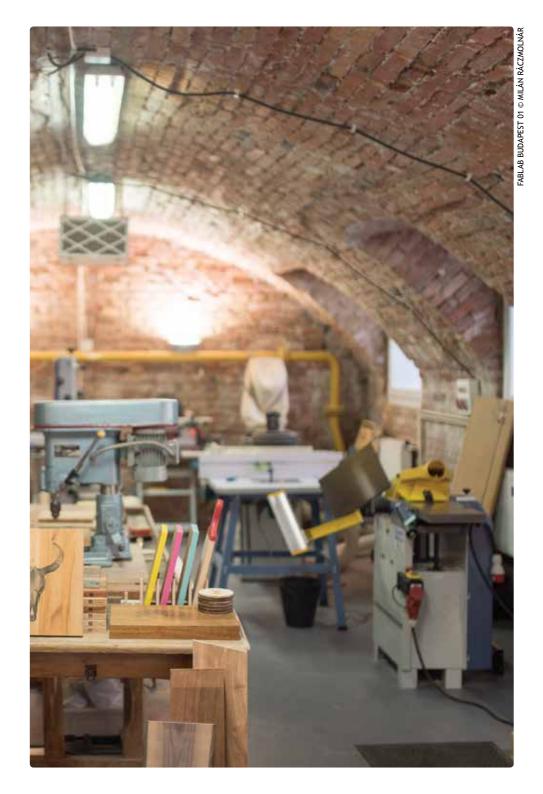


Happylab is a 24/7 workshop where users make things happen!



Best Achievement They are open all the time! Want to laser cut on Sunday at 3 a.m.? Happylab is the place to go! They even created their own management system to run a fab lab smoothly, so check out fabman.io if you want to open your own space. **Atmosphere** Like to meet other Makers? Happylab has lots of them. With over 2,000 members it is one of the largest maker communities in the world. You will find start-up entrepreneurs developing prototypes, students and designers realising their creative ideas, makers fabricating personalised presents and many others. Size issues Running a large lab wasn't enough for these guys, so they started the annual Maker Faire Vienna, too. Address Haussteinstraße 4/2, 1020 Web happylab.at

∇ VINYL CUTTER © CHRISTOPH WELKOVITS
 ← GROWROOM BUILT AT HAPPYLAB AND PRESENTED AT MAKER FAIRE VIENNA © FRANZI KREIS









#### FabLab Budapest Hungary

This open innovation lab boasts the best digital manufacturing and delicious coffee combo in town.

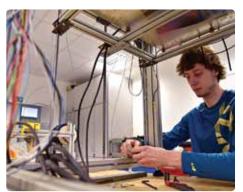
Best Achievement One of the oldest fablabs in the former communist countries, Fablab Budapest is still going strong, although its first coffee machine had to retire after filling no less than 13,142 cups. International **Cooperation** CEO David possesses superpowers he uses to hunt down the best bargains on equipment on the German second-hand market. Location The lab is located literally underground, so it's no surprise its managers believe in bottom-up innovation. Professional Etiquette Machines are treated with utmost respect, and the most beloved ones, like Béla, the 1966 bench drill, are always addressed by their God-given names. Address 1067 Budapest, Eötvös utca 27-27, Hungary Web fablabbudapest.com

<sup>↑</sup> WORKSHOP © DAVID PAP

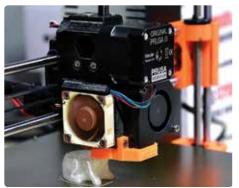
 $<sup>\</sup>stackrel{\cdot}{\kappa}$  Fabatka cutting board  $\stackrel{\circ}{\circ}$  norbert perness

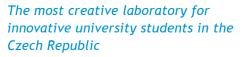
<sup>←</sup> HIGH DEFINITION SLA PRINT © DAVID PAP





## **StrojLab**Czech Republic







**Best Achievement** Being the first university fablab in Czech Republic, StrojLAB has been so successful in establishing a strong relationship with innovative students that everybody wants to study technology in Brno rather than in Prague. Atmosphere A combination of scientific research and fun, where a large-format 3D printer yields a bicycle that you can actually take for a ride. Location Get a guide and a decoder to find it in R&D NETME D5 & A5 part of the campus. Cool Neighbour If the amazing 130 members of the lab and all the talent on the uni campus isn't enough, you can get inspired in the nearby public FabLab Brno, too! Address Faculty of Mechanical Engineering, Brno University of Technology, Technická 2896/2, 616 00 Brno, Czech Republic Web strojlab.cz

 $<sup>\</sup>uparrow$  PEPA BŘEZINA CONSTRUCTING HIS OWN 3D PRINTER, PHOTO: IGOR ŠEFR

 <sup>∇</sup> IN PROCESS, PHOTO: IGOR ŠEFR
 ← HAPPY EASTERS! PHOTO: IGOR ŠEFR





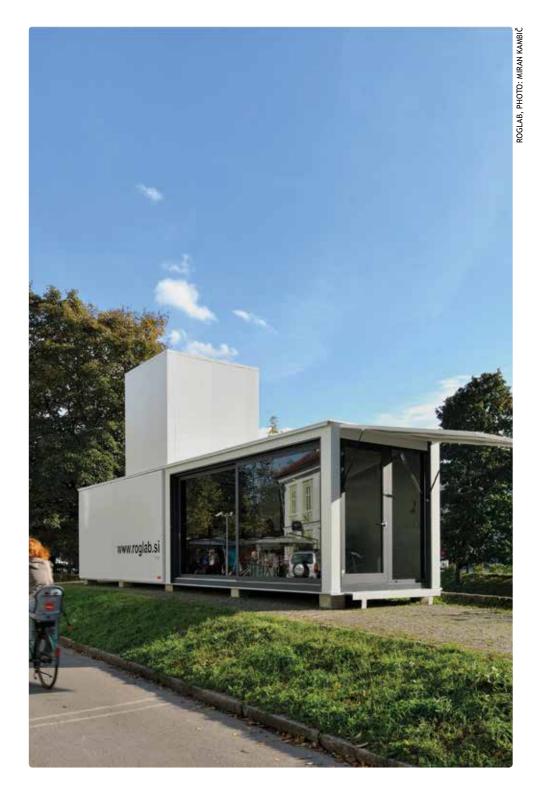


#### FabLab Bielsko-Biała Poland

A creative space for school children and makers in the city of Bolek and Lolek!

Best Achievement Over 600 school children have been taught how to use 3D printing here, so watch out for them, dear Bolek and Lolek fans! Atmosphere Work, leisure, science, leisure, creativity, leisure, fun, leisure. Children They are always in the majority here, and that's the way it should be. Weights & measures 1 fablab manager, 100 sqm, approx. 21% oxygen by volume. Identity Card Open to schoolchildren, saxophone players, comic book illustrators and the general public. Location Outside the town centre, but very well connected, so ideal for those of you who like to read on public transport. Cool neighbourhood The lab sits in a post-industrial neighbourhood, where Bielsko-Biala's 19th and 20th century machines meet their digital reincarnations. Address Cieszyńska 365, 43-300 Bielsko-Biała, Poland Webfacebook.com/fablab24

∇ FABBOX WORKSHOPS PHOTO BY: PATRYCJA WĘGRZYN
 ← IN PROGRESS. PHOTO BY: JAN SIENKIEWIC7





#### RogLab Slovenia



A micro lab where women feel more than welcome

Best Achievement 1 in 3 users are men. Atmosphere A shoebox with lovely music and even lovelier people. Children Encouraged to partake in our activities accompanied by a friend rather than a parent.

WC Not in the building, but available free of charge in a restaurant next door. Weights & Measures Metric system, but we accept pints as well. Identity issues Quite often people mistake our lab for a parking payment kiosk, which can be very funny. Cool neighbour While your prototype is in print, book an appointment with hairdresser Ali across the street for some funny stories and a fantastic hairstyling experience. Address Petkovškovo nabrežje 67, Ljubljana, Slovenia. Web roglab.si

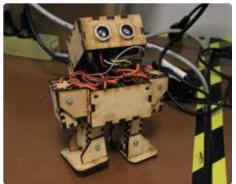


 $\uparrow$  animation workshop by slon animateka, photo: domen pal  $\bowtie$  rusty white by Maja Modrijan, photo: branko čeak  $\leftarrow$  multihanger by shirting team, photo: branko čeak





#### FabLab Bratislava Slovakia



A creative laboratory and platform for everyone into technologies of the 21st century



Best Achievement Fablab Bratislava is proud of its strong connections to local schools, universities, and Star Wars geeks. Atmosphere This is a creative space that provides everyone with an opportunity to discover contemporary technologies for digital manufacturing and a future partner for life (maybe). **Identity Card** Being the first fablab in Slovakia, Fablab Bratislava has for the last five years provided users with numerous workshops, training sessions, and project development support mechanisms, including coffee and donuts. Users The lab serves everyone interested in design, digital creativity, manufacturing, and typical maker community issues such as classical music and gourmet dinners. Address Ilkovičova 8, 842 16 BRATISLAVA, Slovakia Web fablab.sk, cytisr.sk

<sup>←</sup> ROBOTIKA, © FABLAB BRATISLAVA





#### FabLab Zagreb Croatia







A lab with the mind of a maker and the heart of a child

**Best Achievement** This lab brings schoolchildren learning-by-doing principles - like cracking some eggs before making an omelette. Do Local Go Global Their programs are facilitating a shift towards the entrepreneurial mindset. Atmosphere A pop-up lab appearing in schools, libraries and other convenient spaces with electrical sockets. Children They blow adults' minds, so Zagreb fablab tries to blow their minds back. Secret of Success Play. Identity Issues The fablab's overall activities go beyond mere manufacturing and towards creating a local maker culture. **Creative Nomadism Engaging any** specific community is exciting and fun when one has the tools to do it. Biggest Dream Fablab on a boat. Address Trg Vladka Mačeka 2, 10000 Zagreb. Web fablab.hr

↑MAKERBUINO & MAKERPHONE BY ALBERT GAJŠAK. CIRCUITMESS, PHOTO: CIRCUITMESS MUNDUS - WORLD'S SMARTEST BOARD GAME BY MUNDUS PHOTO:

← 3DPRINTING OPEN DAY, PHOTO: MATIJA BLASKOVIC





#### UnternehmerTUM MakerSpace, Munich

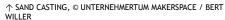
Germany







**Best Achievement UnternehmerTUM** MakerSpace supports the students in the German Warr Hyperloop team who win SpaceX competitions by creating self-propelled pods that reach speeds of over 450 km/h. Motto Practice makes perfect - within 1 to 6 hours you can learn how to use their 3D printers, CNC metal and wood mills, laser cutters and coffee machines. Inclusive Space Whether you're a student, teacher, engineer, hobby gardener or air guitar champion, you're welcome here. Atmosphere Open-minded, innovative people of all genders, ages and skill levels share their MakerLove here. Weights & Measures 1,500 sqm, 200 machines; 1,200 machine courses, 6 tons of sand used for waterjet cutting per year. Address Lichtenbergstr.6, 85748 Garching b. München Web maker-space.de



 $\leftarrow$  HUB AREA, © UNTERNEHMERTUM / BERT WILLER









