TALENTJOURNEY

Newsletter

ISSUE 11 | AUGUST 2021

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Elfl -Tech:

Talentjourney Infographic

Several meetings have been held thus far to establish a clear and sustainable governance or structure for the Talentjourney Transnational Steering Group, which consists of 4 Talentjourney pilot partners from Slovenia, Estonia, Finland and Italy (Šolski center Nova Gorica, I.S.I.S. Malignani, Sataedu & Tallinn Polytechnic School). The transnational steering group identified the most useful frameworks (industry, discipline, field of study or unit of competency) for VET planning and indicators, and the extent to which the training data forecasts policy/industry trends. The task was overseen by Elfl-Tech.

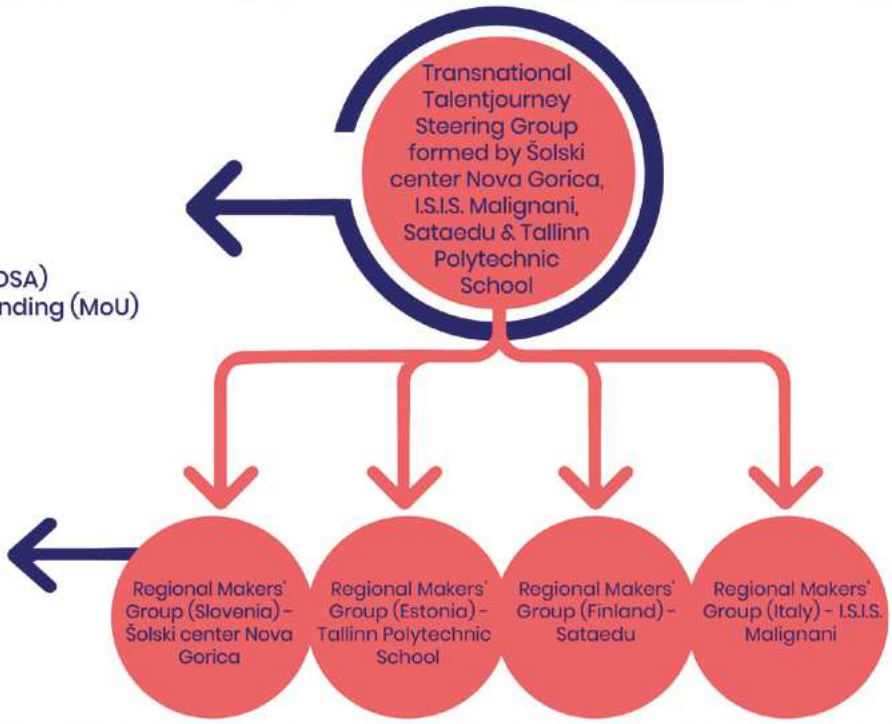
The main goal of the Talentjourney Transnational Steering Group is to collect information on current VET use of data and job trends used to inform the provision of education and training, and to develop summary propositions for good practice in the use of IIOT in smart manufacturing skills development needs.

With the support of the Erasmus+ Programme of the European Union

WHAT

Strategic guidance providing:
- Quality Assurance/Governance
- KPI selection
- Signed Data Sharing Agreement (DSA)
- Signed Memorandum of Understanding (MoU) Database selection

Operational guidance providing:
- Internal data on performance
- Local policy - economic, environmental, societal
- Learner feedback - "Learner voice"



HOW

Regular "virtual partner meetings" of the transnational stakeholder group to establish a structure of sustainable data collection.

The Talentjourney platform shall connect high-quality, reliable and robust labour market intelligence through API connections. This is vital to offering effective career paths and allowing learners to navigate complex labour markets in smart manufacturing, informing career decisions based on jobs and trends in changing IOT/IIOT labour markets.

WHY

1 MILLION

new jobs in smart manufacturing

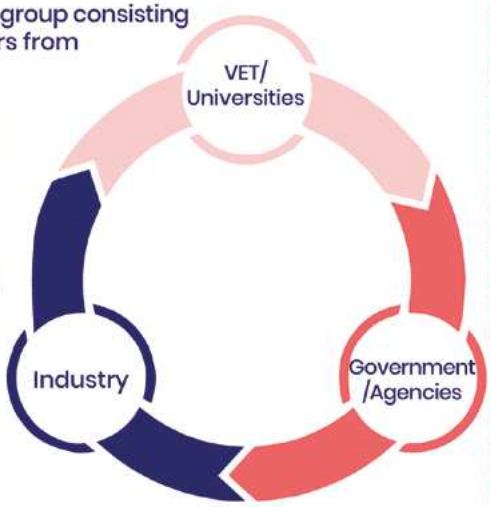
2.4 MILLION

replacements for the retiring workforce expected between 2013 and 2025 in smart manufacturing

WHO

An initial transnational steering group consisting of 4 Talentjourney pilot partners from

Šolski center Nova Gorica,
I.S.I.S. Malignani,
Sataedu
Tallinn Polytechnic School.



WHEN

Talentjourney Transnational Steering Group meetings shall be held each month for an initial period of six months.

WHERE

- World Indicators of Skills for Employment (WISE)
- The Global Jobs Indicators Database (JoIn)
- The Global Public-Private Knowledge Sharing Platform on Skills for Employment (Global KSP)
- VOCEDplus
- Digital Skills and Jobs Platform of the European Commission

talentjourney.si

Based on the findings of the Talentjourney Transnational Steering Group and work completed within WP 2.2 - Sustainability of Data Collection, EIfl-Tech has overseen the development of the Talent-journey infographic to support in the visualisation and delivery of the Talentjourney Transnational Steering Group findings.

/// Madeline Langlois

Sustainability of Data Collection, Infographic, Frameworks for VET planning, Industry Trends

School Center Velenje:

Finalisation of the piloting of new modules developed in Talentjourney

Educational Modules; Slovenia; SC Velenje, SC Kranj; SC Nova Gorica; Online Meeting

Slovenian part of the Talentjourney partners met online on 7th of September to finalise the piloting of the new modules developed within the Talentjourney project.

Representatives of school centres from Velenje, Kranj and Nova Gorica and CPI discussed the particulars of modules on the subjects of Data science, AI, CS, Robotics engineering, Production process development and IIoT holistic view. Present were some of the key stakeholders in the area, among others Director of SC Velenje Janko Pogorelčnik, Headmaster of Higher Professional College Velenje Uroš Sonjak, Headmaster of School of Mechanical, Geotechnical and Environmental Engineering Peter Rozman, Headmaster of School of Electrical and Computer Engineering Simon Konečnik and MIC Velenje representative and leader of WP

Communication of Talentjourney Igor Doler, Director of SC Kranj Jože Drenovec, Headmaster of Technical Highschool Kranj Aljaž Rogelj, Head of MIC Kranj Nataša Kristan Primšar, MIC Egon Pipan, headmaster of Highere vocationl School Nova Gorica, Robert Peršič, headmaster of Electrotechnical and Computer School Nova Gorica, Leader of Talentjourney project and Head of MIC Adrijana Hodak and Tjaša Petelin Bačar form MIC Nova Gorica and representing CPI (Center for vocational education Slovenia), Boris Klančnik.

The meeting was constructive and helped iron out the details of the individual models.

I.S.I.S Malignani - Udine:

Summer is for travelling in the IoT Field

IoT oriented courses; Robotic arm; EDUCATIONAL ROBOTICS; APP & IOT introduction; Digital Citizens; Italy;

Talentjourney has paved the way for innovation in the IOT educational field.

Students at Malignani working on the robotic arm

VET providers have felt the need to empower their already existing protocols and strategies to involve students in IoT related studies. As for our school, we have been left, last July, with the great desire of involving more and more students in the change every innovative action requires. Also, the restrictions imposed during the pandemic have pushed towards the great willingness of spending time together in person. Therefore, some of our most skilled teachers have designed and carried out courses on various topics IoT oriented, at different levels.

"Let's find out more about each one of them."

1. **ALFA, BRAVO, CHARLIE:** 40 students of the 3rd year at Malignani have attended a course on how to operate a robotic arm. Learners have spent 12 hours working on the same robot we presented some months ago on the Talentjourney news. This workshop will lead the most committed students to a more detailed course on the same topic which will terminate with a valuable certification.

Students and teachers at Malignani

2. EDUCATIONAL ROBOTICS – introduction and insights

Robotics is a new "language" that is permeating not only the industrial field but the whole social structure. It has then turned to be crucial for young learners to become familiar with the matter. Just as there was computer literacy 30 years ago, so now we speak of robotic literacy. This course aims at using robotics as a didactic tool to develop the skills and abilities of young people in the technical-scientific field, with peculiar concern to planning, creating and managing digital processes. Furthermore, dealing with robotics tools and issues can become an opportunity to participate in national or international competitions and exhibitions.

The contents of the course include: a. Acquisition and in-depth study of knowledge and techniques for the movement of autonomous robots; b. Robot training in a dedicated facility such as a competition environment; c. Development and set up of an independent robot.

3. APP & IOT: introduction and insights

The course aims at providing students with basic skills on web tools that can allow them to create simple applications running on smartphones and tablets based on the Google Android operating system. It also support learners in finding the best way to "package and market" applications so that they can be made available on the official Google Play store. It includes an introduction to work on version control systems, in particular Git. The practical purpose of these applications is related to the management of IoT devices so that these applications can be connected to various types of "objects" to make them perform elementary tasks.

4. DIGITAL CITIZENS IN ACTION!

The course is open to students who are going to attend the first year.
The aim of the course is to enhance and improve the learners' digital skills by working on the use of digital tools and software in an interdisciplinary and collaborative training context. Teachers have provided a reality-based problem to solve every day and groups of students have worked on their solutions. Teachers have played the role of tutors, helping learners only when needed while leaving them free to develop their attitude interests and enthusiasm.

Here is the invitation students have received "you can work in a group, even with students from other classes, you can bring your own device and use all the others you will find at school; you can also choose which software excites you the most and decide whether to include coding to solve the problems and win your everyday challenge".
Right from the start learners at Malignani are welcome in a social community which holds digital citizenship as a cornerstone of nowadays education.

Even though unusual summer has come to an end, we are ready to start afresh this new school year looking forward to the upcoming events: the implementation of different modules on IoT and Connectivity devices and the great challenge taking place in September, the hackathon on a IoT, Green Economy and Society 2021.

/// Sara Ciganotto

CPI - Institute of the Republic of Slovenia for Vocational Education and Training:

CHAISE

Collaboration, Blockchain Skills Development, International Partnership

CPI, Institute of the Republic of Slovenia for Vocational Education and Training, among other international collaborations participate also in CHAISE Erasmus + project, which is strongly connected to digitalisation. The core mission of the CHAISE project is to develop a strategic approach on blockchain skills development for Europe as well as to deliver future-proof training solutions, in order to tackle blockchain skill shortages and to respond to the current and future skill needs of the European Blockchain workforce.

chaise

blockchain skills for Europe

More about project CHAISE you can learn at their webpage: ***https://chaise-blockchainskills.eu/*** *and in promotional short video, which include description of the planned activities, goals, purpose and results of the project:* ***https://youtu.be/v9dy5Tmwr1Q***

The project involves 23 partners from industry, higher education, vocational education and European networks for the recognition of qualifications, who have set themselves the goal of establishing a European Sectoral Skills Association (SSA) for Blockchain technologies. The project will establish a methodology for systematic documentation and forecasting of labor market needs for "blockchain" skills and improving the quality, relevance and responsiveness of the offer of vocational and professional education. The holder of the 4 year Erasmus + project (KA2, SSA), which started on 1st of November 2020 is UNIVERSITE LYON 1 CLAUDE BERNARD from France with a total of 23 partners from 13 EU countries.

The partnership will build on the existing labor market and the data obtained to define EU-wide knowledge requirements for core professional profiles in the blockchain sector (as provided by the ESCO) and to create transnational, up-to-date VET content addressing both technical and non-technical knowledge. and effective teaching and training methodologies for VET providers in line with recognition procedures in partner countries and EU tools (eg EQF, ECVET and EQAVET).

ECIPA Scarl:

Ecipa is now I4MS contact point: a great opportunity to spread digital innovation opportunities for manufacturing SMEs!

I4ms, innovation, manufacturing, opportunities, digital innovation, competitiveness, networking

Ecipa, TalentJourney partner, has become a contact point of the European initiative I4MS, ICT Innovation for Manufacturing SMEs!

I4MS, ICT Innovation for Manufacturing SMEs, is an European initiative supporting manufacturing SMEs and mid-caps in the widespread use of information and communication technologies (ICT) in their business operations. (https://i4ms.eu/about/). Under I4MS, SMEs can apply for technological and financial support to conduct experiments allowing them to test digital innovations in their business via open calls.

As a contact point, Ecipa and its **Digital Innovation Hub** (http://www.ecipahub.eu/en/) will transfer in an executive manner the opportunities offered by I4MS to stakeholders' network, including TalentJourney, considered the relevance of the issues and commonality of interests.

We will thus foster the uptake of ICT technologies among manufacturing companies and be able to take full advantage of the digital opportunities and establish business-friendly framework conditions thanks to a deep understanding of the digital transformation in the European manufacturing landscape.

I4MS

Digitalising the manufacturing industry in Europe

I4MS (ICT Innovation for Manufacturing SMEs) is the initiative promoted by the European Commission to foster digital innovations of manufacturing EU SMEs to boost their competitiveness in the digital era.

This will be done by promoting encouraging cross-border cooperation, knowledge exchange and providing access to funding for European manufacturing SMEs.

€34 Millions to support European manufacturing SMEs on the following technological domains, through their respective Innovative Actions

ARTIFICIAL INTELLIGENCE

AI REGIO

Provides a toolkit of **64 AI-enabled assets** to be integrated with the AI4EU toolkit and conducts more than 30 DIH-driven and SME-oriented application experiments.

airegio-project.eu

HUMAN-ROBOT INTERACTION

BETTER FACTORY

Invites Manufacturing SMEs and Mid-Caps to redesign their current product portfolio together with Artists and Technology Suppliers in a Knowledge Transfer Experiment

betterfactory.eu

DIGITAL TWINS

CHANGE2TWIN

Provides guidance and funding to manufacturing SMEs and mid-caps to **acquire a digital twin**

change2twin.eu

DIGITAL TWINS

DIGITBRAIN

Enable **Digital Twin technologies** through the support of more than 20 highly innovative cross-border experiments, bringing together technology providers and manufacturing end-users.

digitbrain.eu

ALL TECHNOLOGIES

DIH-WORLD

Harmonise and **widen the landscape of European DIHs** across all of Europe to address the "digital innovation hubs divide".

dihworld.eu

ARTIFICIAL INTELLIGENCE

KITT4SME

Delivers a modularly **customisable digital platform** that can seamlessly introduce **artificial intelligence** in their production systems. The project will ensure that the kits are widely distributed to an audience of SMEs and midcaps in Europe.

@kitt4sme

LASER-BASED MANUFACTURING

Pulsate

European Network that aims to empower SMEs digital competencies by facilitating the adoption of **Laser-Based Advanced Additive Manufacturing (LBAAM)** technologies in production environments.

pulsate.eu

HUMAN-ROBOT INTERACTION

VOJEXT

Design, develop and validate affordable, market-oriented, agile, multipurpose and easy-to-repurpose, **autonomous, mobile and dexterous robotic systems** as the main component of a smart, agile and scalable cognitive CPS for industry.

vojext.eu

www.i4ms.eu hello@i4ms.eu @I4MS_Europe I4MS

Estonian Electronics Industries Association:

Experience with internships in Estonia

Summer Internships, Estonia, Electronic companies, Ouman Estonia OÜ, Stoneridge Electronics AS

Estonian students are very interested in summer internships in electronics companies while the companies would be happy to use additional labour in the summer. Unfortunately, the demand and supply do not always meet.

Two international companies, Ouman Estonia OÜ and Stoneridge Electronics AS, will share their experience in recruiting trainees in summer 2021.

Ouman Estonia OÜ operates in Saaremaa, the largest island located in Western Estonia. The company has used its own system for years – the children and acquaintances of company's employees who are at least 16 years old, come to work during summer holidays. Although these are untrained people who, unlike apprentices sent from school, may not know anything about the electronics industry, Ouman is very happy with their trainees and the feedback from the staff is always positive.

Of course, not every job is suitable for young people - for example, they must not deal with chemicals or work sections that require the use of high-speed equipment. Young people are mostly used in electronics assembly. The training takes place on site and the work is organized so that there is no routine. Ouman has used the system for years and many summer trainees have joined the permanent workforce later.

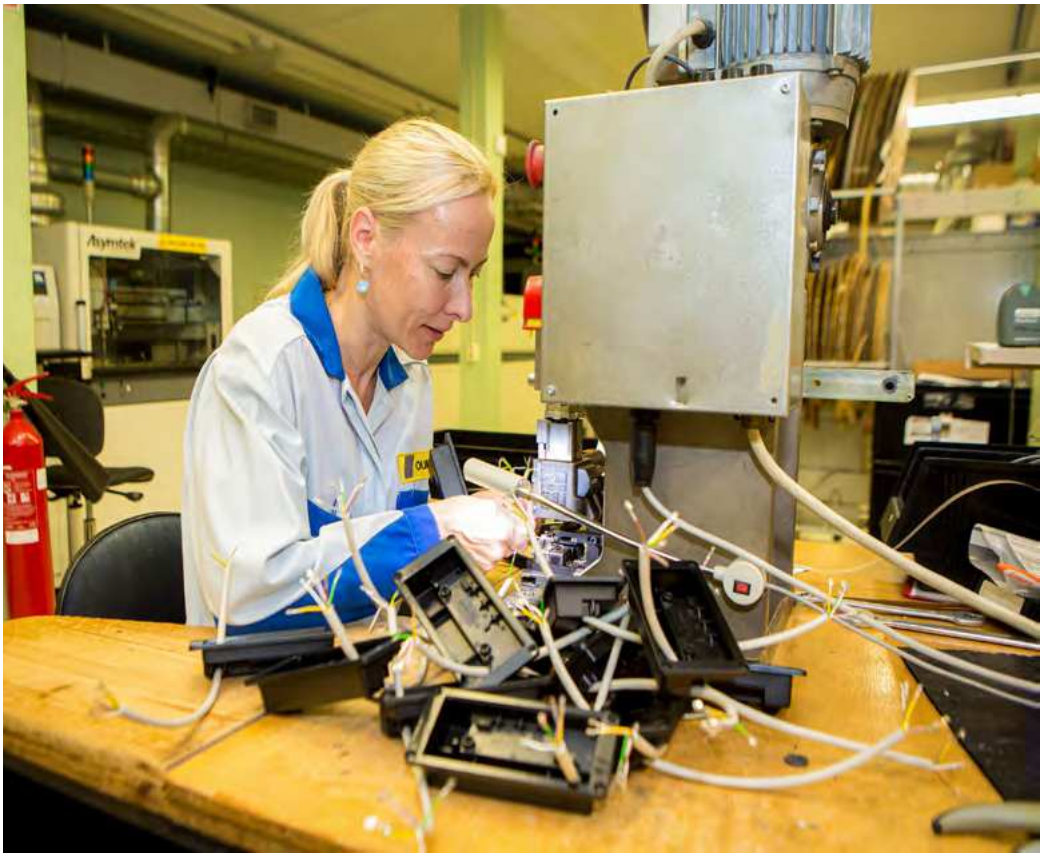
However, students from vocational and higher education institutions rarely end up in internship in Ouman and it's not easy to attract them to work even after graduation. One reason is definitely the location - larger cities are attracting professionals with higher salaries. Secondly, Saaremaa seems to be a distant and isolated corner. Even the young people from the island are hesitant to come back after their studies in larger cities in mainland – this is mainly an issue with technicians and engineers. Local college and vocation

school used to have electronics specialties but today these are discontinued.

It is still remarkable that all those who find their way to Ouman will stay there. The staff is very stable and the company is optimistic about the future, because people have started to appreciate clean air, beautiful nature and a safe environment as a living environment. So, they are more likely to move to beautiful place behind the sea.

Electronic equipment developer and manufacturer Stoneridge Electronics, located near capital city Tallinn, has more advantages in finding employees in terms of location. Trainees have been used for years. Many of them come from Tallinn University of Technology because company needs a lot of engineers, but also VETs contribute with their students. The trainees' contributions are mainly used in the fields of production engineering and maintenance, software and electronics development and logistics, but young people also work as assembly line operators. Like Ouman, Stoneridge is pleased: young people are fast, punctual and smart employees.

However, the last two years have been influenced by the coronavirus. Part of work is done from home offices, distance and lack of resources do not allow for proper guidance of trainees. The students themselves are still very interested and internships are also a springboard for further careers - many trainees have become permanent staff. Stoneridge, along with many other manufacturing companies, is looking forward to continue usual work routines so that more students can actually try real work after learning theoretical basis. For Stoneridge interns are the offspring of their engineers and the internship is a good opportunity to get to know each other.



Electronic assembly is a usual work for summer interns at Ouman Estonia

Induatrial Fair, Estonia, Workshops, Seminars

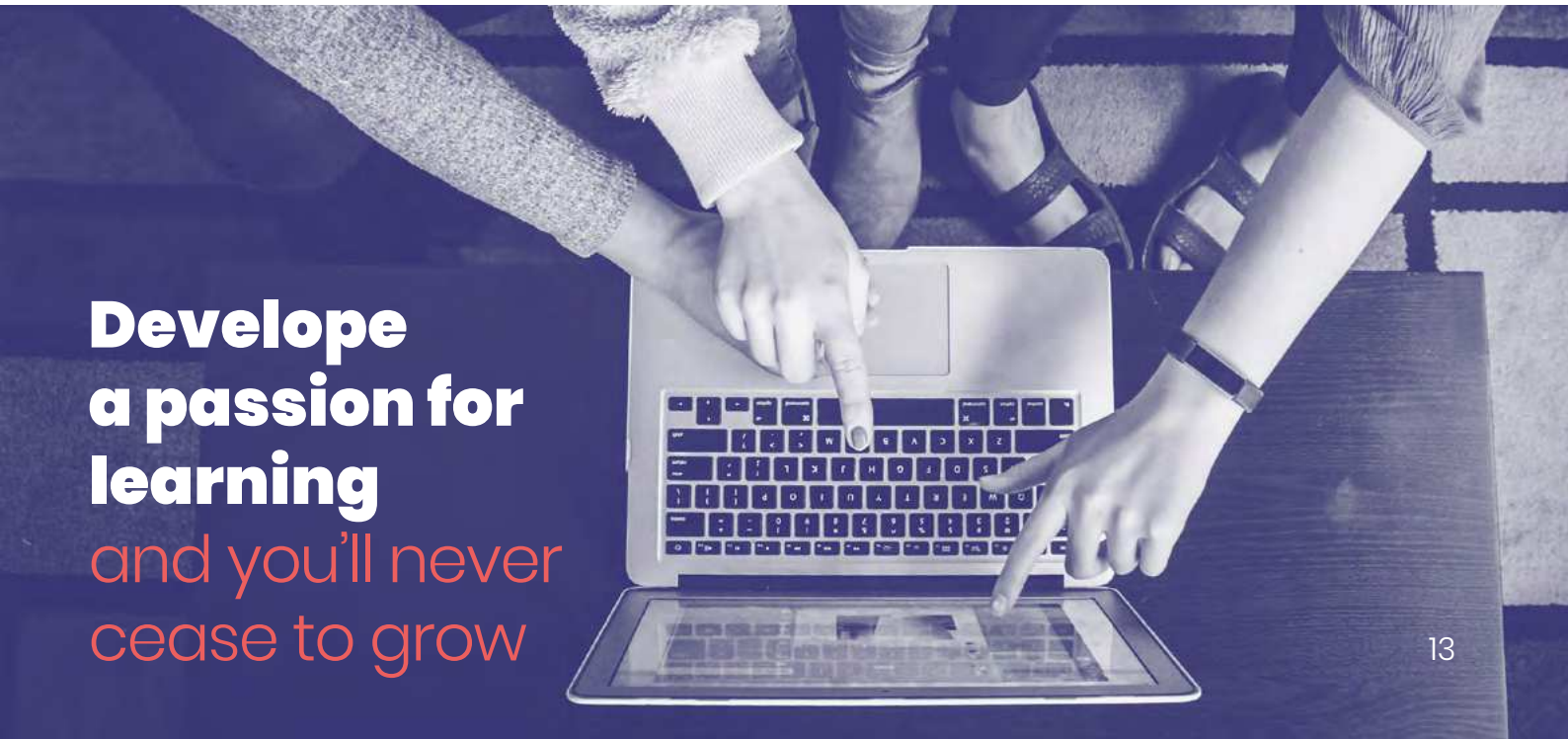
Estonian Electronics Industries Association:

Industrial fair Instrutec in Tallin, Estonia

"Annul industrial fair Instrutec took place from September 8-10 in Tallinn, Estonia. Along with exhibitors it hosted a programme of workshops and seminars. Demo areas gave an opportunity to see the student formula car and a self-driving car developed by the Tallinn University of Technology, a welding simulator, robots and virtual learning tools. Estonian Electronics industries Association together with IPC hosted a National Open Hand Soldering Competition on September 9th – the task was to mount a board (SMT + THT) within an hour.

See:

https://instrutec.ee/en/participation/general-information/ "



Develope a passion for learning
and you'll never cease to grow

Reach Out and Touch Everything

*Do you want to get involved in the project? Send us an **email.***

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