

VOJEXT

NEWSLETTER

Next-generation cognitive cobots for smarter industries!

January 2022 | Issue 3



IN THIS ISSUE:

About VOJEXT - p. 1

Latest news and developments - p. 2

Calendar of upcoming events - p. 4

VOJEXT partners - p. 4

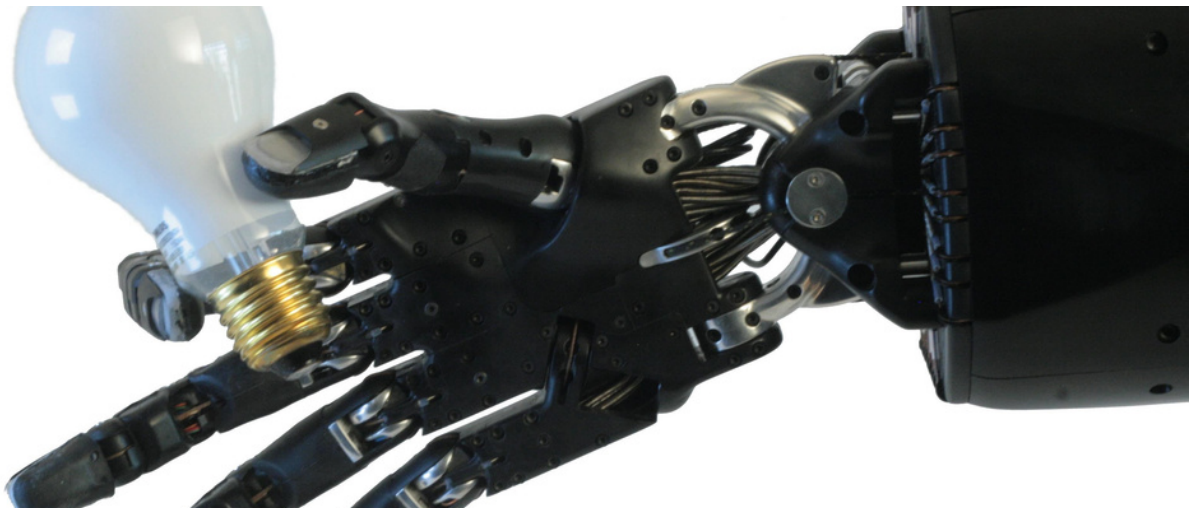
ABOUT VOJEXT

VOJEXT (Value Of Joint EXperimentation in digital Technologies for manufacturing and construction) is a 42-months long Horizon 2020 project, started in July 2020, which aims to provide a favourable business and technological framework for cognitive autonomous systems supporting human-robot interaction.

Under the vision Value Of Joint EXperimentation (VOJEXT) in digital technologies, the project dynamizes science-driven industry approaches engaging human and Cyber Physical Systems (CPS) in the same loop; thus amplifying the cognitive capabilities needed to achieve more effective sociotechnical and business ecosystems. For this purpose, VOJEXT will design, develop, and demonstrate affordable, market-oriented, multipurpose and easy-to-repurpose robotic systems; to be developed as one of the main components of a smart and scalable CPS ecosystem for the manufacturing and construction industry.

You can read more about the project, its main aims and specific objectives [here](#). For all the latest updates, please follow us on social media:





LATEST NEWS AND DEVELOPMENTS

Completion of 1st Open Call and start of acceleration programme for winning SMEs

The 5 SMEs selected for funding in the 1st Open Call, held in the spring of 2021, will address 5 TECH CHALLENGES aimed at extending the capacity and technology outreach of VOJEXT demonstrators. They will be granted a total funding of € 230 000 for implementation of their projects.

The kick-off (welcome) meeting with the winners was held on 15 December 2021. They are joining the project to integrate their solutions to the VOJEXT platform to boost innovation in cognitive robotics. They will be on board for the next 6-12 months.

Below you can find the names of the companies, their short profile and the respective challenge they will address.

Challenge # 1 - Construction Robotic Toolset

Development of a robotic solution designed for accomplishing plastering tasks with a robotic arm and 1 or more different end-effectors. Such solution should be able to work on top of an existing mobile wheeled robot part of the VOJEXT environment.

Winning SME - High Performance Creators, Bulgaria

The company's mission is to transform advanced technologies and to contribute for a better life by offering innovative solutions in the sectors of clean and renewable energy, industrial and home automation, intelligent agriculture and life science.

Challenge # 2 - Navigation

Development of secure and autonomous robot navigation in highly dynamic environments.

Winning SME - ElifLab, Italy

An innovative company that operates in the fields of data science and artificial intelligence helping organizations extract value from data in order to reduce costs, increase sales and effectiveness of operations, predict results, monitor and automate processes.



Challenge # 3 - Visualization of point cloud in a VR headset

Scene and improve system's usability, allowing user to navigate around the generated pointcloud using VR equipment.

Winning SME - Extend Robotics Limited, UK

The company develops cloud-based human-robot interface software for non-robotic expert to teleoperate and program robotic manipulators remotely for physical tasks.

Challenge # 4 - Integrate two leap motion devices to improve user's hand mapping

Synchronize two leap motion devices to allow precise but cheap hand mapping. Integrate the output with the teleop pipeline.

Winning SME – Taktify, Netherlands

The company develops and supplies innovative and high-tech ICT solutions for healthcare, real estate and service management sectors.

Challenge # 5 - Investigate a new method of hand mapping and integrate it to the teleop pipeline

Reproduce a method concerning hand movements tracking. If applicable, the method will be integrated into the teleop pipeline.

Winning SME - Codewheel, Cyprus

The company develops a stack of technologies around human digitization, spanning content creation, spatial human-centered applications, and immersive experience deployments.

Release of promotional video

VOJEXT's promotional video is out now! Watch it [here](#). The highlights include: project objectives and expected outcomes; application of the cobot in different use case pilots; open calls for SMEs and artists; collaboration with DIH and S+T+ARTS networks; and much more.

Forthcoming launch of 2nd Open Call for SMEs and S+T+ARTS Call for artists

The 2nd Open Call "Pilots" with a total budget of € 620 000 is expected to be launched in June 2022. It will fund SMEs and mid-caps to deploy Vojext technology through small-scale pilots across Europe and across sectors.

The S+T+ARTS Call for two artistic residencies with a total budget of € 60 000 is also expected to be launched in the summer of 2022. More information to be found [here](#).



CALENDAR OF UPCOMING EVENTS

- 25-29 April 2022, Hannover - Hannover Messe
- 23-27 May 2022, Philadelphia - IEEE International Conference on Robotics and Automation
- 31 May - 2 June 2022, Munich - LogiMAT International Trade Fair for Intralogistics Solutions and Process Management
- 13-17 June 2022, Bilbao Exhibition Centre - BIEMH International Machine-Tool Biennial Exhibition
- 28-30 June 2022, Rotterdam - European Robotics Forum

VOJEXT PARTNERS

Led by the Universidad Politécnica de Madrid (UPM), VOJEXT brings together a multidisciplinary and complementary consortium team consisting of twenty partners from 14 EU and associated countries. VOJEXT partners comprise 8 SMEs (Shadow, Robotnik, Tree Technology, Technovative Solutions, Kontor 46, F6S Network Limited, Officina Keller Napoli, OSAI Automation Systems), a mid-cap (PEMU), two large companies (Acciona, Mercedes Benz), two universities (UPM, NEBRIJA), four research centres (Fortiss GmbH, Przemysłowy Instytut Automatyki i Pomiarów -PIAP-, Istituto Italiano di Tecnologia, Deutsches Zentrum fuer Luft- und Raumfahrt-DLR-) and three non-profit organisations (Pôle EMC2, Bulgarian Chamber of Commerce and Industry, Stichting Waag Society).

Check out a map of all participating countries and short profiles of the partners [here](#).

GET IN TOUCH WITH US

For all the latest news, please visit VOJEXT's [website](#). If you would like to contact us or subscribe for our newsletter, please drop us an email at contact@vojext.eu

Thank you for reading. Expect our 4th issue of VOJEXT's newsletter in July 2022.



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 952197