



FLEXIGROBOTS

Flexible robots for intelligent automation
of precision agriculture operations

European Robotics Forum 2021

Daniel Calvo

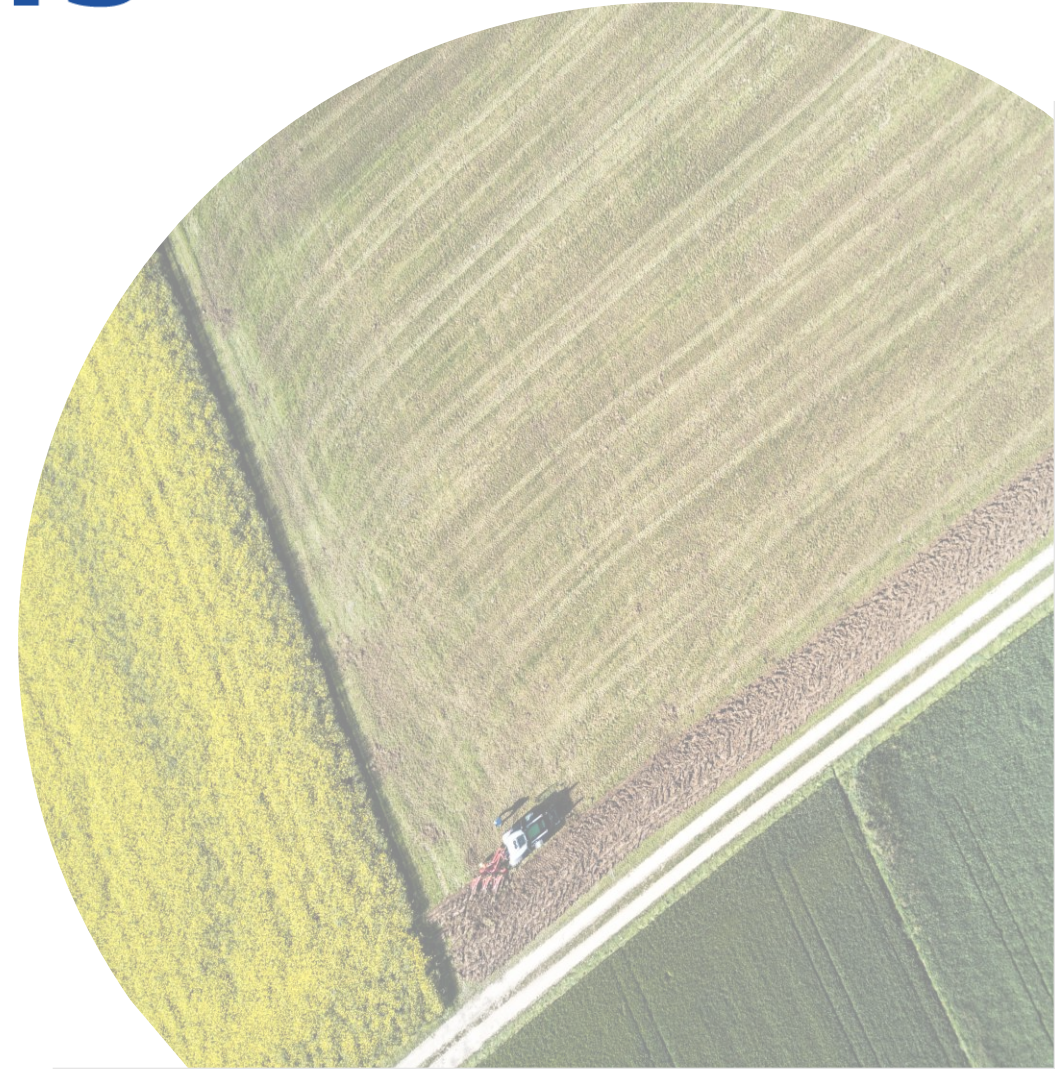
Project Coordinator

Head of AI, Data & Robotics. Atos Research and Innovation

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This project has received funding from the European Union's H2020 research and innovation programme under the grant agreement No. 101017111



Ambition and objectives



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Challenges of current agriculture robotics systems

1. Design to automate only specific tasks.
2. Isolated from other systems and devices.
3. Higher safety risk and impact on the fields.
4. Specialised training for operation.
5. Low return of investment.

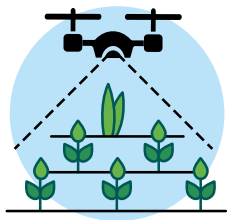


Approach



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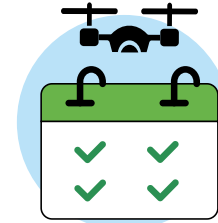
Cost-effective multi-robot systems for heterogeneous, safe and complex agricultural missions



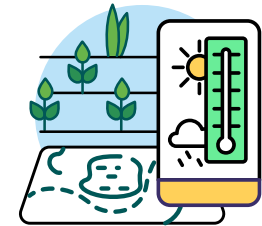
Reference
architecture



AI-driven robotics,
services



ELSEC guidelines &
requirements



Large-scale
industry validation

FlexiGroBots will make a change



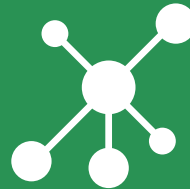
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Demonstrate the impact of robots in the agri-food sector



Reduction of risks for large-scale robotics systems



Empower DIHs with new services and capabilities



Contribute to open, industry-led or de-facto standards



Competitiveness of European agricultural market



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Thank you!
www.flexigrobots-h2020.eu

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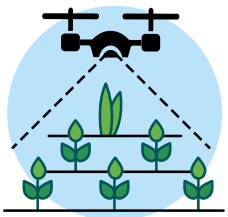
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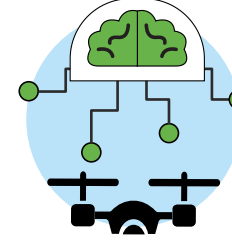
Reference architecture



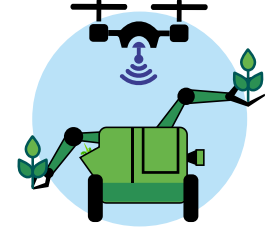
Secure data exchange



AI-driven robotics, services & analytics



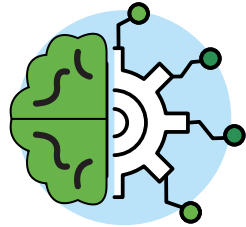
Trustworthy multi-robot systems



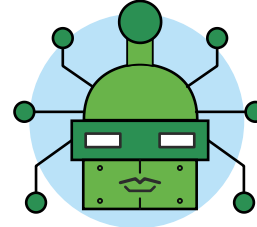
Heterogeneous multi-robots LSPs



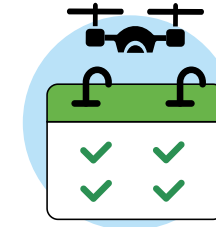
Large-scale industry validation



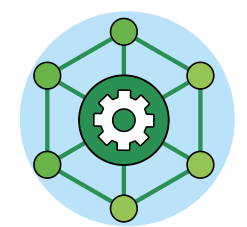
Business models for agriculture



Reinforcement of AI4EU platform



ELSEC guidelines & requirements



Enlarge DIHs capabilities