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Déploya
Robotizing vertical work in construction

In a nutshell

Déploya aims at robotizing vertical work in construction. Our mission is to eliminate the high safety risks and long installation times associated with the use of conventional scaffolding systems, as well as frequent errors caused by intensive manual work.
Our solution is a vertical grid used primarily for the installation of ventilated façades and cladding systems. It is based on origami folding, enabling rapid deployment. It integrates rails for positioning mobile robots, which are initially used for quality assurance on existing scaffolding. In the long run, we intend to replace scaffolding with full automation of façade component mounting.

Why is our technology important?

The increasing complexity of modern façade systems, driven by stricter energy-efficiency requirements, has slowed down construction and increased labor and skill requirements. While work at height on scaffolding continues to be dangerous, construction companies struggle to find qualified workers and deliver projects on time, without critical errors.
Our technology aims to significantly speed up façade installation through robotic assistance, reducing manual workload and helping teams complete projects faster while maintaining quality. The technology will be introduced progressively. The first MVP will be deployed on existing scaffolding systems, with the goal of speeding up preparation processes and reducing mistakes through automated CAD-to-field layout projection, while also improving scaffolding safety through anomaly detection. Later stages of development aim to reduce dependence on scaffolding and move toward full automation of façade installation tasks.

The benefits of our solution

- Project margins increased by up to 60% (MVP)
- Zero rework by avoiding CAD-to-field transfer errors
- 2.5× faster preparation (MVP), up to 10× faster installation (full automation)

Keywords
Ventilated façades, Construction Robotics, Origami folding, Scaffolding, CAD-to-field

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Get in touch
We'd love to speak to you more about our project.
You can book some time with us here: founders@deploya.ch