



Case Study

Ocado Technology

About the Company

Ocado Technology develops the software and systems that power the online grocery retail platforms of Ocado.com, the world's largest online-only grocery retailer. Their vision and proposition to customers, is shopping made easy. Headquartered in the UK, they have over 14,000 global employees. Alex Harvey, head of robotics and autonomous systems at Ocado Technology, leads the relationship between Ocado and CSAIL Alliances.

The Challenge

Ocado established its business to revolutionize the way the world shops. They joined CSAIL Alliances in 2016 to help their R&D team identify and explore research and new technologies that could improve efficiency and their ability to scale. They were particularly interested in connecting with leading researchers working on automation.

The Solution

During their first year of membership, Ocado attended CSAIL Alliances' annual meeting and participated in one lab visit. The lab visit provided the opportunity for Harvey and members of the Ocado team to explore and learn from multiple research groups. They left with a clearer and deeper understanding of the scope of work each research team was working on and how it could impact their work.

After the lab visit, Ocado was particularly interested in furthering the conversation with Professor Brian Williams, whose work concentrates on model-based autonomy, the creation of long-lived autonomous systems that are able to explore, command, diagnose and repair themselves using fast, commonsense reasoning.

Ocado asked the CSAIL Alliances team to facilitate a conversation with Professor Williams. The meeting resulted in Ocado presenting Williams with an understanding of their technology, challenges and vision for the future of the company. Professor Williams was then able to identify specific pieces of his research that best aligned with their interests/needs.

The Engagement

Wanting to ensure several members of Ocado's team could learn from Professor Williams knowledge and research, Ocado expressed interest in having Professor Williams come to their headquarters in the UK. The CSAIL Alliances team helped to arrange the visit.

During the week-long visit, Professor Williams had one-on-one meetings and conducted on site workshops. Topics covered at the workshop included humanoid robotics, high automation, and fleets. His insight and perspectives provided Ocado with ideas on how to implement his research in their own workplace that wouldn't compromise their operations.

"Brian did heroically in taking my very loose, and probably somewhat lacking in detail agenda suggestions, and turned it into something that was very useful and very relevant," Harvey said.

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Harvey said the quality of discussions ‘exceeded his expectations’ and that that the sessions could be applied to a much broader range of projects and products than he anticipated.

He cited the most impressive takeaway from Ocado’s relationship with CSAIL being Williams’ domain relevance, which is closely linked with Ocado’s problem use case.

“The creativity of the researchers to take what they understood and import it into even more domains than I had anticipated was a really good validation of the great preparation, material and the great insight that Professor Williams has,” Harvey said.

Harvey credits a CSAIL Alliances Senior Client Relations Coordinator, Philip Arsenault, for facilitating the successful workshop. He found Arsenault useful to talk to and an excellent intermediary while scheduling and coordinating logistics.

“He really, really helped a lot,” Harvey said. “The engagement from [Arsenault] and from that team was really instrumental in making it successful.”

The Impact

Ocado researchers are commercial taskmasters. According to Harvey, they benefited from having time to talk about subjects in a broader fashion with Williams and gained from his “deep, varied and highly capable insight” in different areas. Ocado researchers left the workshop buzzing with concepts Williams presented. They have since discussed how they could apply them to their core projects.

Harvey also said it was good from a cultural perspective for Ocado researchers to gain access and insight from a professor at CSAIL. They benefited from Williams’ relevant content, which is pertinent to Ocado’s ongoing projects.

“Without fail, everyone left the workshops really excited and enthusiastic. It generated an awful lot of positive discussion about how we could improve the work that we’re doing at Ocado.”