Dr. Guillaume de Chambrier
Avenue de la gare 3
1020 Renens
(+41) 79 822 76 35

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Ocado Limited
Freepost 13498
PO BOX 3 62
Hatfield AL9 7BR

Dear Ms. Markey

I am writing to you having been informed of your vacancy through the robotics-worldwide message group. A Swiss-British national, I have recently obtained my Ph.D doctorate in robotics from the Swiss Federal Institute of Technology Lausanne (EPFL) in the LASA robotics laboratory, partner in the SecondHands European project.

My expertise lies in Machine Learning (ML), mathematical modelling and robotics. I have both taught cours in Machine Learning (MSc and Ph.D) and published work on new machine learning methods in reinforcement learning and non-parametric Bayesian state space estimation with an emphasis on robotic applications. See current examples of my ML activities (chambrierg.com/projects/np_regression/ and chambrierg.com/projects/e-pca/).

My research for the past five years has focused on acting under uncertainty. Using belief-space planning techniques I have developed and published robotic control algorithms which consider state uncertainty during task execution. I am an expert in ROS, ros_control, Moveit for robotic systems and I have strong software expertise in C++/Python under Linux. I have developed a ROS package for an ATI force-torque sensor and a KUKA LWR robot (see github.com/epfl-lasa/kuka-lwr-ros), and José Ramón Medina, working in the SecondHands project, is currently using my software and he would be happy to give you an appraisal. This framework has been used specifically to teach the KUKA to search for and connect an electric power socket without using any visual information in a programming by demonstration framework (see chambrierg.com/projects/rl_belief_space/). I have also experience with other robotic platforms such as the Barrett WAM Arm, Hand and Allegro Hand and I have contributed a new distance metric to the KDTree of point cloud library.

Ocado is company where I can contribute in a significant way to state-of-the-art robotics research using my knowledge of sensor-guided robotic systems. The increasing investment by Ocado in robotic systems and their recognition of the importance of human-robot collaboration makes it an ideal environment. I should be most happy to be part of an ambitious robotic company looking to acquire a global presence.

I will be moving to London in January and I am at your disposition at any time for an interview. You can also visit my personal web-page: www.chambrierg.com

Yours sincerely,

Guillaume de Chambrier