

JOB DESCRIPTION
Research Associate: Autonomous Systems
Vacancy Ref: A2717

Job Title:	Research Associate: Autonomous Systems	Present Grade: 6
Department/College:	School of Computing and Communications	
Directly responsible to:	Prof Plamen Angelov	
Supervisory responsibility for:	None	
Other contacts		
Internal:		
Other team members of the Collaborative Technology project; Staff and Students at the University		
External:		
Collaborators/partners working on the project (QinetiQ, Nuvia, Bristol Maritime Robotics Ltd, Fortis Mechanical Design Ltd.		
Major Duties:		
<div><div></div><div><div>1.</div><div>Undertaking research and software development necessary to achieve Lancaster University’s aims within the InnovateUK - funded project “Collaborative Technology Hardened for Underwater and Littoral Hazardous Environments”. More specifically, to develop software tools within ROS using Python to enable simulation as well as experimentation with both, lab-based Pioneer robot and industrial robot (Longcross) provided by one of the partners (QinetiQ), to enable optimal and safe navigation using sonar data, SLAM and decision making with elements of autonomy.</div></div><div></div><div><div>2.</div><div>The candidate will be experienced in working with ROS for simulations and Python and willing to learn object recognition and machine vision and apply these for improving the robot situation awareness.</div></div><div></div><div><div>3.</div><div>Working effectively in a cross-disciplinary team to achieve the above goal.</div></div><div></div><div><div>4.</div><div>Assisting in the collaboration, planning, development, and publication of our work within the Collaborative Technology project.</div></div><div></div><div><div>5.</div><div>Participating in all project meetings; preparing progress reports, presenting talks, posters and reports to disseminate the results of the research.</div></div><div></div><div><div>6.</div><div>Preparing progress reports for project meetings describing the results of the project.</div></div><div></div><div><div>7.</div><div>Participating in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field.</div></div><div></div><div><div>8.</div><div>Be involved in preparation of conference and journal papers for publication of project findings.</div></div><div></div><div><div>9.</div><div>Any other duties appropriate to the grade, as directed by the Principal Investigator or his representative.</div></div></div>		