

Department	School of Computing
Supervisors	Professor Frauke Zeller
Project Title	Social Robotics
<p>PROJECT DESCRIPTION</p> <p>Social robotics is an interdisciplinary field covering the areas of robotics/HRI, communication, culture, AI and more. Interested applicants should have a relevant degree in related fields and come with a keen interest and experience in working with social robots, human-machine interaction or interaction design research.</p> <p>This position is for graduate students who want to contribute to cutting-edge research into the future applications of robotics that entertain, support, assist, or simply accompany humans. We are asking critical, as well as aspiring, questions on how to develop intelligent, social robots. We want to envisage and positively shape our future living with/next to them. The prospective student will be working closely with Professor Zeller, who has a long-standing background in HRI, AI and Human-Machine Communication, and who is the co-designer and inventor of the famous first hitchhiking robot, hitchBOT, that garnered worldwide media and public attention.</p> <p>The student will be able to develop their own research project related to the developing and/or testing of social robots in certain scenarios and settings. A state-of-the-art interaction lab, sensorium suite, and a stable of social robots are available to be used by the student. Further collaborative research development and use of cutting edge technologies will be made possible through the extensive network of Professor Zeller.</p> <p>Academic qualifications</p> <p>A first degree (at least a 2.1) ideally in any related social robotics related field with a good fundamental knowledge of HRI or AI or interaction design research.</p> <p>English language requirement</p> <p>IELTS score must be at least 6.5 (with not less than 6.0 in each of the four components). Other, equivalent qualifications will be accepted. Full details of the University's policy are available online.</p> <p>Essential attributes:</p> <ul style="list-style-type: none"> • Competent in research and networking • Knowledge of the subject matter and academic writing • Good written and oral communication skills • Strong motivation, with evidence of independent research skills relevant to the project • Good time management 	
Indicative Bibliography	Zeller, F. (2021). Algorithmic machines: From binary communication. Algorithms and Communication. https://doi.org/10.48541/dcr.v9.4

	<p>Zeller, F., Smith, D. H., Foster, M. E., Petrick, R. P. A., Stinson, J., & Ali, S. (2021). Ethical Frameworks for Artificial Intelligence (AI) and Social Robots in Children's Healthcare Experiences. Paper presented at HRI 2021 Workshop on Measuring Child-Robot Relationships. https://child-robot-interaction.github.io/assets/files/submission1.pdf</p> <p>Zeller, F., & Dwyer, L. (2022). Systems of collaboration: challenges and solutions for interdisciplinary research in AI and social robotics. <i>Discover Artificial Intelligence</i>, 2(1). https://doi.org/10.1007/s44163-022-00027-3</p> <p>Zeller, F., Smith, D. H., Duong, J. A., & Mager, A. (2020). Social Media in Human-Robot Interaction. <i>International Journal of Social Robotics</i>, 12(2), 389-402. https://doi.org/10.1007/s12369-019-00573-4</p>
Enquiries	For informal enquiries about this PhD project, please contact Professor Frauke Zeller
Web page	https://www.napier.ac.uk/research-and-innovation/research-degrees/application-process