

<b>Department</b>	School of Computing
<b>Supervisors</b>	Dr. Nikolaos Pitropakis
<b>Project Title</b>	Social Media Information Leakage and Privacy Preserving Mechanisms
<p><b>PROJECT DESCRIPTION</b></p> <p>In early 2018 when it was revealed that Cambridge Analytica had harvested the personal data of millions of peoples' Facebook profiles without their consent and used it for political advertising purposes, thus resulting in a major political scandal, a massive fall in Facebook's stock price and calls for tighter regulation of tech companies' use of personal data. The scope of this project is to show that publicly available data on social media can be crawled without the users' consent and they are more than enough to provide information about the users' character and behaviour. The project's scope is to investigate how people leak sensitive information through their social media accounts and seek ways that can increase their privacy against malicious parties that can leverage on it.</p> <p><b>Academic qualifications</b></p> <p>A first degree (at least a 2.1) ideally in computer science with a good fundamental knowledge of cyber security.</p> <p><b>English language requirement</b></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. <a href="#">Full details of the University's policy</a> are available online.</p> <p><b>Essential attributes:</b></p> <ul style="list-style-type: none"> <li>• Experience of fundamental privacy, data protection, data governance issues and regulatory frameworks</li> <li>• Competent in one or more programming languages</li> <li>• Knowledge of Distributed Ledger Technology (DLT)</li> <li>• Good written and oral communication skills</li> <li>• Strong motivation, with evidence of independent research skills relevant to the project</li> <li>• Good time management</li> </ul> <p><b>Desirable attributes:</b></p> <p>Competent in Python  Fundamental knowledge of machine learning algorithms and techniques  Fundamental knowledge of CUDA library</p>	
<b>Indicative Bibliography</b>	<p>Pitropakis, N., Kokot, K., Gkatzia, D., Ludwiniak, R., Mylonas, A., &amp; Kandias, M. (2020). Monitoring users' behavior: anti-immigration speech detection on Twitter. <i>Machine Learning and Knowledge Extraction</i>, 2(3), 192-215.</p> <p>Kandias, M., Galbogini, K., Mitrou, L., &amp; Gritzalis, D. (2013, June). Insiders trapped in the mirror reveal themselves in social media. In <i>International Conference on Network and System Security</i> (pp. 220-235). Springer, Berlin, Heidelberg.</p> <p>Kandias, M., Mitrou, L., Stavrou, V., &amp; Gritzalis, D. (2013, July). Which side</p>

	are you on? A new Panopticon vs. privacy. In 2013 International Conference on Security and Cryptography (SECRYPT) (pp. 1-13). IEEE.
<b>Enquiries</b>	For informal enquiries about this PhD project, please contact Dr. Nick Pitropakis: <a href="mailto:n.pitropakis@napier.ac.uk">n.pitropakis@napier.ac.uk</a> +44 131 455 2789
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