

# Ricardo Pio Monti

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CONTACT INFORMATION	25 Howland Street London, W1T 4JG	r.monti@ucl.ac.uk Italian, Argentine citizen
EDUCATION	<b>Imperial College London</b> Ph.D., Statistics • Advisors: Dr. Anagnostopoulos and Prof. Montana • Thesis Overview: <i>Penalized likelihood methods for covariance selection in the context of non-stationary data</i> MSci., Mathematics • 1 <sup>st</sup> Class Honours, Scorex Prize for Academic Excellence • Final Year Project: <i>Sequential Monte Carlo methods to predict results in tennis matches</i>	October 2012 — April 2017 October 2008 — June 2012
EXPERIENCE	<ul style="list-style-type: none"><li>• <b>Postdoctoral training fellow, <i>Gatsby Unit, UCL</i></b> Working under the supervision of Prof. Aapo Hyvärinen. My current research focuses on the estimation of unnormalized statistical models with applications in deep learning and the study of neuroimaging data.</li><li>• <b>Consultant, <i>Mentat Innovations</i></b> <i>Mentat Innovations</i> is a small consultancy focused on delivering data science driven solutions to challenges in cyber-security. Working with a major financial services provider, my role consisted in implementing and validating anomaly detection models in the context of physical security.</li><li>• <b>Data Science Intern, <i>Spotify</i></b> <i>Spotify</i> is a leading music streaming service with over 100 million users. Working within the Analytics Research team, my role consisted of quantifying the stability and robustness of in-house music recommendation systems; resulting in several suggestions to improve performance and interpretability of recommendations.</li><li>• <b>Data Scientist, <i>DataKind</i></b> <i>DataKind</i> is a volunteering organization which allows data scientists to donate their skills to charities. Over the course of one year I was involved with a large UK charity helping quantify the impact of their programs and identifying areas for further investment of resources.</li></ul>	April 2017 — Present January 2017 — March 2017 July 2016 — Sept 2016 Sept 2014 — Sept 2015
SELECTED PUBLICATIONS	<ol style="list-style-type: none"><li>1. Monti, R. P., <i>et al.</i>, “Learning population and subject-specific brain connectivity networks via Mixed Neighborhood Selection”, <i>Annals of Applied Statistics</i>, (11):2142-2164 [Code]</li><li>2. Monti, R. P., <i>et al.</i>, “A framework for adaptive penalization in streaming Lasso models”, <i>Submitted</i> [Code]</li><li>3. Monti, R. P., <i>et al.</i>, (2014). “Estimating Time-varying Brain Connectivity Networks from Functional MRI Time Series”, <i>NeuroImage</i> (103):427-443 [Code]</li><li>4. Lorenz, R., Monti R. P., <i>et al.</i>, (2016). “The automatic neuroscientist: A framework for optimizing experimental design with closed-loop real-time fMRI”, <i>NeuroImage</i> (129):320-334</li><li>5. Lorenz, R., Violante, I., Monti R. P., <i>et al.</i>, (2018). “Dissociating frontoparietal networks using neuroadaptive Bayesian optimization”. <i>Nature Communications</i>, In Press.</li></ol>	
HONOURS AND AWARDS	<ul style="list-style-type: none"><li>• Faculty of Natural Science Award for Excellence in Teaching Imperial College London</li><li>• Student Paper Award International Workshop on Pattern Recognition in Neuroimaging, Stanford University</li></ul>	May 2013 June 2015
SKILLS	<ul style="list-style-type: none"><li>• Programming (proficient) — R, Python</li><li>• Programming (working knowledge) — SQL, Shell scripting, C</li><li>• Languages — Spanish (native), English (native), Italian (Basic)</li></ul>	
SERVICE	<ul style="list-style-type: none"><li>• Reviewing for JMLR, ICML</li></ul>	
REFERENCES	Available upon request	