
Homework 8

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Abstract

Can classification methods help to automate the production of political indicators in near real time? The Militarized Interstate Disputes (MID) dataset, produced by the Correlates of War project, has been widely used in political research over the past three decades and is increasingly used in policy applications. Despite its value for understanding conflict, MID data coding is performed in iterative batches by human coders that lag behind the present by several years. However, reliance solely on human coders is neither necessary nor desirable. Using automated classification methods (Support Vector Machines) to classify real-time event data (GDELT), this project hopes to obtain a close approximation to the MID dataset at a fraction of the cost in both time and money.

1 Methods

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References

- [1] Alexander, J.A. & Mozer, M.C. (1995) Template-based algorithms for connectionist rule extraction. In G. Tesauro, D. S. Touretzky and T.K. Leen (eds.), *Advances in Neural Information Processing Systems* 7, pp. 609-616. Cambridge, MA: MIT Press.
- [2] Bower, J.M. & Beeman, D. (1995) *The Book of GENESIS: Exploring Realistic Neural Models with the GEneral NEural Simulation System*. New York: TELOS/Springer-Verlag.
- [3] Hasselmo, M.E., Schnell, E. & Barkai, E. (1995) Dynamics of learning and recall at excitatory recurrent synapses and cholinergic modulation in rat hippocampal region CA3. *Journal of Neuroscience* **15**(7):5249-5262.