## Statistical Models for Opinion Spam Detection Leveraging Linguistic and Behavioral Cues

## **Opinion Spam** (Fake Reviews) Challenge: Scientific Impact: customer Service Detecting fake reviews S Excellent Focus on learning and (opinion spam) from evaluation on unlabeled 0 Good limited ground truth data AVE data for learning. Strategies in detecting Unsupervised learning and opinion spam can be **Deception Classifiers** Linguistic + applied to sockpuppets, evaluation viral hoaxes, forensic Behavioral **Sockpuppet Detection** Reviews linguistics, and other abuse Feature Extraction **Behavioral Modeling Broader Impact: Reinforcement Relational** Solution: Modeling Improve trustworthiness Learning from noisy and of web content and gold standard data reduce social exploit reinforcement implausibility relations between (1) Scoring fraudsters, (2) fake Course on security ٠ reviews, (3) deceptive analytics leveraging NLP, **Opinion spam detection** language, and (4) fraud DM, and statistical framework leveraging multiple, behavior methods modalities. Characterizes several . behavioral modalities of deception posing a marketing, consumer, and

economic risk

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