SENTIMETRIX, INC

Capabilities overview

Areas of Expertise

- Big Data analytics
  - High-speed analysis of heterogeneous data sets
- Social Media Analytics
  - Opinion tracking, influence analysis, bot detection
- Machine Learning
  - Developed methodology to quickly train model ensembles to achieve optimal accuracy/performance
- Natural Language processing
  - Sentiment, Opinions and Emotions detection
- Health applications
  - Detection of early signs PTSD,TBI (text)
  - Automated activity analysis (video)

Technology Areas

- ## Natural language processing
  - Sentiment and emotion analysis
  - Document clustering
  - Entity extraction and relationship mapping

- ## Social Networks Analysis
  - Influence analysis
  - Information diffusion analysis and prediction
  - Counter-messaging

- ## Predictive modeling
  - Fast training adaptable to variety of domains
  - Deep learning / Supervised learning / Unsupervised learning
  - Ensemble classification for high accuracy

- ## Proven Technology Stack
  - Successfully used to address customer needs in various areas:
    - Health   - Politics   - Public Relations
    - Financial   - Security   - Publishing and Advertising

Significant projects

- COSMIC (DARPA)
  - Developedhigh-performance system allowing processing of millions of messages per day, of integrated with a dashboard enabling analysis to monitor relevant topics and trends before they become viral, provide trend predictions on sentiment towards topics of interest, and identify potential methods to counteract the diffusion
  - An off-shot bot detection technology is being transitioned to US Army

- COPTADS (US Army MedCom)
  - Developed emotion-tracking technology and predictive models to assess, based on the analysis of textual documents, mental wellness and stress level of the authors
  - Integrated with Apache cTakes for clinical notes processing capability
  - Winner of the NGRID competition (Harvard Medical School/NIH)

- SentiBility++ (US Army)
  - Built a system to automatically predict the likelihood and scope of events affecting stability of countries (violent public protests, epidemics of infectious diseases) based on social media data, reducing the need for "boots on the ground" monitoring.
  - Accuracy ranges from 85% for protest violence to 90% for Ebola spread
  - Transitioning to the Army Research Lab

- M3I (US Army)
  - Developed a model for prediction of violent protests based on multi-modal data collected from social media

- PathML (NIH)
  - Developed a Machine Learning based system for automatic activity classification in videos

Sentimetrix Technology

- **SentiGrade**^{TM} Sentiment Analysis Platform
  - Computes the intensity of sentiment on a topic in any given document (e.g. tweet, Facebook post, blog post, news article, email, SMS)

- **SenteMotion**^{TM} Emotion Analysis Platform
  - Tracks the intensity of different emotions in any given document

- **SentiCast**^{TM} Forecasting Platform
  - Makes forecasts on the basis of the sentiment analysis, emotion analysis, as well as other relevant variables
  - Forecasts sentiment spread in social media in real time

- **SentiSocial**™ Analytics and Influence Platform
  - Identifies trend-setters and amplifiers of opinion;
  - Identifies the set of *k* people who would be the best social media ambassadors for your brand;

- **SentiBot**^{TM}
  - A platform for bot detection in social networks

- **SentiHealth™**
  - A suite of applications for tracking a variety of psychological signals and physical activities