ECONLP 2018 – 1ˢᵗ Workshop on Economics and Natural Language Processing

@ ACL 2018, Melbourne, Australia, July 20, 2018

Workshop Programme

09:00–09:30 **Introduction to the ECONLP Workshop**
Udo Hahn

09:30–10:00 Economic Event Detection in Company-Specific News Text
Gilles Jacobs, Els Lefever and Véronique Hoste

10:00–10:30 Causality Analysis of Twitter Sentiments and Stock Market Returns
Narges Tabari, Piyusha Biswas, Bhanu Praneeth, Armin Seyeditabari, Mirsad
Hadzikadic and Wlodek Zadrozny

10:30–11:00 **Morning Coffee Break**

11:00–11:20 A Corpus of Corporate Annual and Social Responsibility Reports: 280 Million
Tokens of Balanced Organizational Writing
Sebastian G.M. Händschke, Sven Buechel, Jan Goldenstein, Philipp Poschmann,
Tinghui Duan, Peter Walgenbach and Udo Hahn

11:20–11:40 Word Embeddings-Based Uncertainty Detection in Financial Disclosures
Christoph Kilian Theil, Sanja Štajner and Heiner Stuckenschmidt

11:40–12:00 A Simple End-to-End Question Answering Model for Product Information
Tuan Lai, Trung Bui, Sheng Li and Nedim Lipka

12:00–14:00 **Lunch Break**

14:00–14:20 Sentence Classification for Investment Rules Detection
Youness Mansar and Sira Ferradans

14:20–14:40 Leveraging News Sentiment to Improve Microblog Sentiment Classification in
the Financial Domain
Tobias Daudert, Paul Buitelaar and Sapna Negi

14:40–15:00 Implicit and Explicit Aspect Extraction in Financial Microblogs
Thomas Gaillat, Bernardo Stearns, Gopal Sridhar, Ross McDermott, Manel
Zarrouk and Brian Davis

15:00–15:20 Unsupervised Word Influencer Networks from News Streams
Ananth Balashankar, Sunandan Chakraborty and Lakshminarayanan Subramanian

15:30–16:00   Afternoon Coffee Break

16:00–16:30   Discussion and Wrap-up

16:30–17:30   Poster Session - All of the Papers Presented at the Workshop

Organizers:

- Udo Hahn   Friedrich-Schiller-Universität Jena, Germany   udo.hahn@uni-jena.de
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- Yue Zhang   Singapore U of Technology and Design, Singapore yue_zhang@sutd.edu.sg

Description: The workshop addresses the increasing relevance of natural language processing (NLP) for regional, national and international economy, both in terms of already launched language technology products and systems, as well as new methodologies and techniques emerging in interaction with the paradigm of Computational Social Science. The focus of the workshop is on the many ways, how NLP alters business relations and procedures, economic transactions, and the roles of human and computational actors involved in commercial activities.

Papers submitted to this workshop should address (not excluding other topic areas of relevance for the workshop theme):

- NLP-based (stock) market analytics, e.g., prediction of economic performance indicators (trend prediction, performance forecasting, etc.), by analyzing verbal statements of enterprises, businesses, companies, and associated legal or administrative actors
- NLP-based product analytics, e.g., based on (social) media monitoring, summarizing reviews, classifying and mining complaint messages, etc.
- NLP-based customer analytics, e.g., customer profiling, tracking product/company preferences, screening customer reviews or complaints, identifying high-influentials, etc.
- NLP-based organization/enterprise analytics (e.g., tracing and altering social images, risk prediction, fraud analysis, analysis of business, sustainability and auditing reports)
- Market sentiments and emotions – evidence from consumers' and enterprises' verbal behavior and their communication about products and services
- Competitive intelligence services based on NLP tooling
- Relationship and interaction between quantitative (structured) economic data (e.g., time series data) and qualitative (unstructured verbal) economic data (press releases, newswire streams, social media contents, etc.)
- Information management based on organizing and archiving verbal communication of organizations and enterprises (emails, meeting minutes, business letters, etc.)
- Credibility and trust models for agents in the economic process (e.g., trading, selling, advertising) based on text/opinion mining communication traces and legacy data
- Verbally fluent software agents (language bots) as actors in economic processes serving business interests, e.g., embodying models of persuasion, fair trading, etc.
- Enterprise search engines (e-commerce, e-marketing)
- Consumer search engines, market monitors, product/service recommender systems
- Customer-supplier interaction platforms (e.g., portals, helps desks, newsgroups) and transaction support systems based on natural language communication
- Specialized modes of information extraction and text mining in economic domains, e.g., temporal event or transaction mining
- Information aggregation from single sources (e.g., review summaries, automatic threading)
- Ontologies for economics and adaptation of lexicons for economic NLP
- Corpora and annotations policies (guidelines, metadata schemata, etc.) for economic NLP
- Economy-specific text genres (business reports, sustainability reports, auditing documents, product reviews, economic newswire, business letters, law documents, etc.) and their implications for NLP
- Dedicated language resources for economic NLP (e.g., lNER taggers, sublanguage parsers, pipelines for processing economic discourse)

Submission information:

Two types of papers are solicited: **Long paper**s (8 pages) should describe solid results with strong experimental, empirical or theoretical/formal backing, **short papers** (4 pages) should describe work in progress where preliminary results have already been worked out. Accepted papers will appear in the workshop proceedings. All papers are allowed unlimited but sensible pages for references. Final camera-ready versions will be allowed an additional page of content to address reviewers' comments. All submissions should be in PDF format (using ACL 2018 style sheets for the main conference; see http://acl2018.org/call-for-papers/) and made through the Softconf website set up for this workshop (https://www.softconf.com/acl2018/ECONLP/).

Key Dates (several extensions):

Deadline for paper submission:	**24 April 2018 (at 11:59 p.m., anywhere on Earth (UTC-12))**
Notification of acceptance:	**20 May 2018**
Camera-ready version due:	**3 June 2018**
Workshop:	**20 July 2018**