

VarDial 2017

**Fourth Workshop  
on NLP for Similar Languages, Varieties and Dialects  
(VarDial'2017)**

**Proceedings of the Workshop**

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## Preface

VarDial is a well-established series of workshops held annually and co-located with top-tier international NLP conferences. Previous editions of VarDial were VarDial'2014, which was co-located with COLING'2014, LT4VarDial'2015, which was held together with RANLP'2015, and finally VarDial'2016 co-located with COLING'2016. The great interest of the community has made possible the fourth edition of the Workshop on NLP for Similar Languages, Varieties and Dialects (VarDial'2017), co-located with EACL'2017 in Valencia, Spain.

The VarDial series has attracted researchers working on a wide range of topics related to linguistic variation such as building and adapting language resources for language varieties and dialects, creating language technology and applications that make use of language closeness, and exploiting existing resources in a related language or a language variety.

We believe that this is a very timely series of workshops, as research in language variation is much needed in today's multi-lingual world, where several closely-related languages, language varieties, and dialects are in daily use, not only as spoken colloquial language but also in written media, e.g., in SMS, chats, and social networks. Language resources for these varieties and dialects are sparse and extending them could be very labor-intensive. Yet, these efforts can often be reduced by making use of pre-existing resources and tools for related, resource-rich languages.

As part of the workshop, we organized the first VarDial evaluation campaign with four shared tasks: Discriminating between Similar Languages (DSL), Arabic Dialect Identification (ADI), German Dialect Identification (GDI), and Cross-Lingual Parsing (CLP). The campaign received a very positive response from the community. A total of 28 teams subscribed to participate in the four shared tasks, 19 of them submitted official runs, and 15 of the latter also wrote system description papers, which appear in this volume along with a shared task report by the task organizers.

We further received 14 regular VarDial workshop papers, and we selected nine of them to be presented at the workshop. The papers that appear in this volume reflect the wide range of interests related to language variation. We include papers applying NLP tools to perform dialect analysis, to study mutual intelligibility and diatopic variation in historical corpora, as well as core NLP tasks and applications such as dialect and similar language identification, adaptation of POS taggers, and machine translation between similar languages and dialects.

We take the opportunity to thank the VarDial program committee and the additional reviewers for their thorough reviews. We further thank the VarDial Evaluation Campaign participants, as well as the participants with regular research papers, for the valuable feedback and discussions.

The organizers: Preslav Nakov, Marcos Zampieri, Nikola Ljubešić, Jörg Tiedemann, Shervin Malmasi, and Ahmed Ali



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# Conference Program

**Monday, April 3, 2017**

**9:30–9:40**     *Opening*

09:40–10:00    *Findings of the VarDial Evaluation Campaign 2017*

Marcos Zampieri, Shervin Malmasi, Nikola Ljubešić, Preslav Nakov, Ahmed Ali, Jörg Tiedemann, Yves Scherrer and Noëmi Aepli

10:00–10:30    *Dialectometric analysis of language variation in Twitter*

Gonzalo Donoso and David Sanchez

10:30–11:00    *Computational analysis of Gondi dialects*

Taraka Rama, Çağrı Çöltekin and Pavel Sofroniev

**11.00–11.30**    *Coffee break*

11:30–12:00    *Investigating Diatopic Variation in a Historical Corpus*

Stefanie Dipper and Sandra Waldenberger

**12.00–13.00**    **Invited talk - Paolo Rosso (Polytechnic University of Valencia, Spain)**

*Author Profiling at PAN: from Age and Gender Identification to Language Variety Identification (invited talk)*

Paolo Rosso

**13.00–14.30**    *Lunch*

**Monday, April 3, 2017 (continued)**

**14.30–16.00 Poster Session**

*The similarity and Mutual Intelligibility between Amharic and Tigrigna Varieties*

Tekabe Legesse Feleke

*Why Catalan-Spanish Neural Machine Translation? Analysis, comparison and combination with standard Rule and Phrase-based technologies*

Marta R. Costa-jussà

*Kurdish Interdialect Machine Translation*

Hossein Hassani

*Twitter Language Identification Of Similar Languages And Dialects Without Ground Truth*

Jennifer Williams and Charlie Dagli

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*Discriminating between Similar Languages using Weighted Subword Features*

Adrien Barbaresi

**16.00–16.30** *Coffee break*

16:30–17:00 *Exploring Lexical and Syntactic Features for Language Variety Identification*

Chris van der Lee and Antal van den Bosch

17:00–17:30 *Learning to Identify Arabic and German Dialects using Multiple Kernels*

Radu Tudor Ionescu and Andrei Butnaru

17:30–18:00 *Slavic Forest, Norwegian Wood*

Rudolf Rosa, Daniel Zeman, David Mareček and Zdeněk Žabokrtský

**18.00** *Closing remarks*

