# alpöktem

#### contact

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## languages

turkish native english fluent spanish intermediate german beginner

## programming

Python, Linux bash, Processing, MATLAB, Java, C, C++

### interests

speech technologies, computational linguitics, machine translation, prosody, deep neural networks

#### **hobbies**

illustration, thai boxing, playing drums and guitar, biking, hiking

# **experience**

#### 2017 - Now COL·LECTIVAT SCCL

Barcelona, SPAIN

Co-founder / Computational Linguistics Expert

Advisor during the development of open-source ASR for Catalan language. Detailed work:

- Collection of open speech datasets from TV shows and parliament proceedings
- Releasing of open-source CMUSphinx ASR models
- Organising an ASR workshop with theory and hands-on sessions

#### 2014 - Now UNIVERSITAT POMPEU FABRA

Barcelona, SPAIN

Associate Professor

Data structures and algorithms II, Software engineering for web applications

2014 - 2018 Researcher in Natural Language Processing Group (TALN)

Work carried out for EU project KRISTINA: A multilingual and interactive digital healthcare assistant

- Developing a module for punctuation restoration of raw transcribed speech input
- Preparing and annotating a Turkish surface and deep syntax corpus

#### 2012 - 2014 **FRAUNHOFER IAIS**

Bonn, GERMANY

Student Research Assistant

Work carried out for EU project LinkedTV: Television linked to the web

- Automatic generation of a speaker identification dataset from raw TV excerpts
- Automatic topic segmentation in news shows using word semantic distances

### 2010 - 2011 **ASELSAN**

Ankara, TURKEY

Software Engineer

Developing a software infrastructure for mapping in radar applications

## **education**

#### 2014 - 2019 **PhD, Computational Linguistics** Universitat Pompeu Fabra, Barcelona, SPAIN

Thesis: Incorporating Prosody into Neural Speech Processing Pipelines -Applications on automatic speech transcription and spoken language machine translation

Main contributions:

- Pipeline for collecting, handling, prosodic annotation and visualization of monolingual and bilingual speech data
- An English-Spanish parallel expressive movie speech corpus
- Neural framework for spoken language punctuation restoration using lexical, syntactic and prosodic cues
- A framework for joint modelling of raw prosodic information with lexical information in sequence-to-sequence neural machine translation
  Awards:

2018 María de Maeztu DTIC-UPF Open Science Award

#### 2011 - 2014 MsC. Computer Science

University of Bonn, Bonn, GERMANY

Thesis: Person identification and topic segmentation for news broadcast using banner text recognition

Other course projects:

- Score informed audio source separation, decomposing right and left hand notes in piano recordings using score information from MIDI
- German to English translator, using n-gram based translation and language modelling

#### 2006 - 2010 BsC, Computer Science

Bilkent University, Ankara, TURKEY

Senior project: Line and Word Segmentation in Historical Manuscripts Skew tolerant segmentation of text lines and words from scanned images of M.K. Atatürk's handwritings and Ottoman manuscripts

2008 - 2009 ERASMUS Exchange student

University of Bath, Bath, UNITED KINGDOM

# alpöktem

# **publications**

Prosodic phrase alignment for machine dubbing

Alp Öktem, Mireia Farrús, Antonio Bonafonte

September, 2019 - Proceedings of the 20th Annual Conference of the International Speech Communication Association (INTERSPEECH), submitted

Building an open source automatic speech recognition system for Catalan

Baybars Külebi, Alp Öktem

November, 2018 - Proceedings of IberSPEECH, Barcelona, Spain

Bilingual prosodic dataset compilation for spoken language translation

Alp Öktem, Mireia Farrús, Antonio Bonafonte

November, 2018 - Proceedings of IberSPEECH, Barcelona, Spain

Visualizing punctuation restoration in speech transcripts with Prosograph

Alp Öktem, Mireia Farrús, Antonio Bonafonte

September, 2018 - Proceedings of the 19th Annual Conference of the International Speech Communication Association (INTERSPEECH), Hyderabad, India

Attentional parallel RNNs for generating punctuation in transcribed speech

Alp Öktem, Mireia Farrús, Leo Wanner

October, 2017 - International Conference on Statistical Language and Speech Processing (SLSP), Le Mans. France

Revising the METU-Sabancı Turkish Treebank: An exercise in surface-syntactic annotation of agglutinative languages

Alicia Burga, Alp Öktem, Leo Wanner

September, 2017 - Proceedings of the Fourth International Conference on Dependency Linguistics (Depling), Pisa, Italy

Prosograph: A tool for prosody visualisation of large speech corpora

Alp Öktem, Mireia Farrús, Leo Wanner

August, 2017 - Proceedings of the 18th Annual Conference of the International Speech Communication Association (INTERSPEECH), Stockholm, Sweden

Automatic extraction of parallel speech corpora from dubbed movies

Alp Öktem, Mireia Farrús, Leo Wanner

August, 2017 - Proceedings of the 10th Workshop on Building and Using Comparable Corpora (BUCC), Vancouver, Canada

From raw data to semantically enriched hyperlinking: Recent advances in the LinkedTV analysis workflow

D. Stein, A. Öktem, E. Apostolidis, V. Mezaris, J.-L. Redondo García, R. Troncy, M. Sahuguet, B. Huet

October, 2013 - Proceedings of Networked & Electronic Media (NEM) Summit, Nantes, France

Processing the manuscripts of Atatürk

T. Soysal, H. Adiguzel, A. Öktem, A. Haman, E.F. Can, P. Duygulu, M. Kalpakli

April, 2010 - IEEE 18th Signal Processing and Communications Applications Conference (SIU), Diyarbakir, Turkey