alpöktem

contact

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http://alpoktem.github.io

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languages

turkish native english fluent spanish fluent catalan beginner

programming

Python, Linux, Processing, MATLAB

libraries

PyTorch, Docker, FastAPI

interests

speech technology, low-resource NLP, language preservation, community-centered AI, open source, social impact

hobbies

biking, hiking, snowboard, guitar, drums, Raspberry Pi

experience

2019 - Now CLEAR GLOBAL/TRANSLATORS WITHOUT BORDERS

Computational Linguist

Lead organization's expansion into language technology as technical expert, guiding data collection, AI development and product prototyping for crisis and development

- Published 20+ datasets and models, including speech and translation systems
 Asian language with according to the second second
- for 15+ underrepresented African and Asian languages with community support
 Built and integrated production-level MT and ASR APIs for language services
- Co-authored influential publications with <u>TICO-19</u>, <u>Masakhane</u>, and <u>BibleTTS</u>

2017 - Now COL·LECTIVAT SCCL

Co-founder / Technology lead

Pioneering NLP solutions for social impact, focusing on Catalonia and Spain's minorized, endangered and historical languages through community-powered initiatives

- Spearheaded digitalization initiatives for Aranese, Tamazight and Judeo-Spanish
- Pioneered open source neural TTS for Catalan, Galician and Judeo-Spanish
- Openly published 12 datasets and 10 models for 5 low-resource languages
- Launched MT apps for <u>Judeo-Spanish</u>, <u>Tamazight</u> (160k+ requests since 2022)
 Designed and delivered 8 AI and MT workshops to 100+ participants

2014 - 2019 UNIVERSITAT POMPEU FABRA

Associate Professor

Data structures and algorithms II, Software engineering for web applications

Researcher in Natural Language Processing Group (TALN)

EU project KRISTINA: A multilingual and interactive digital healthcare assistant

- Developed punctuation restoration module for raw transcribed speech, improving automated processing of healthcare dialogues
- Created and annotated the first Turkish surface and deep syntax corpus

2012 - 2014 FRAUNHOFER IAIS

Student Research Assistant

- EU project LinkedTV: Television linked to the web
- Built automated speaker identification using dataset generated from TV excerpts
- Developed automatic news topic segmentation using word semantic distances

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

- Pioneered machine dubbing using prosodic phrase alignment, cited 35+ times
 - Created *Heroes Corpus*: first dubbed movie speech corpus for SLT research
- Published software suite for annotating and visualizing prosody in speech data
- Developed novel punctuation restoration for transcribed speech using prosody
- Implemented multimodal neural machine translation that uses prosodic cues
- Received 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:

• Developed Score informed audio source separation, decomposing right and left

- hand notes in piano recordings using score information from MIDI
- Implemented German to English statistical machine translation

2006 - 2010 **BsC, Computer Science**

Bilkent University, Ankara, TURKEY

Senior year 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

+ participants

Barcelona, SPAIN

Bonn, GERMANY

Barcelona, SPAIN

Remote

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publications

*full list can be found at: alpoktem.github.io/publications

Carmen Maga	o User Interface for Galician Text-to-Speech iños, Alp Öktem and 6 other researchers from Instituto da Lingua Galega PROPOR, Santiago de Compostela, Spain	
20 authors from	e, high-fidelity, multilingual, and uniquely African speech corpus n Coqui.ai, Masakhane and various acedemic institutions 22 - Interspeech, Seoul, South Korea	
Alp Öktem, Ro	langered language for the digital age - The Case of Judeo-Spanish dolfo Zevallos, Yasmin Moslem, Özgür Güneş Öztürk, Karen Gerson Şarho URALI workshop organized within LREC, Marseille, France	on
Alp Öktem, Mi	<i>tion for prosody-informed speech processing</i> reia Farrús, Antonio Bonafonte 21 - Language Resources and Evaluation (Journal paper)	
Alp Öktem, Eri	ili Machine Translation for Humanitarian Response c DeLuca, Rodrigue Bashizi, Eric Paquin, Grace Tang rica NLP workshop organized within EACL, Online : paper award	
18 authors from Amazon Al, M	ranslation Initiative for COvid-19 n George Mason, Carnegie Mellon, John Hopkins University, Translated, crosoft, Facebook AI, Appen, Google and Translators without Borders 20 - NLP COVID-19 Workshop organized within EMNLP, Online	
48 authors from November, 202	rearch for Low-resourced Machine Translation: A Case Study in African Lang m Masakhane 20 - Findings of EMNLP, Online 1 Wikimedia Foundation Research of the Year Award	luages
Alp Öktem, Mı	guage Technology for Humanitarian Response Ihannad Albayk Jaam, Eric DeLuca, Grace Tang - IEEE Global Humanitarian Technology Conference (GHTC), Online	
Baybars Küleb	<i>Neural Text-to-Speech System in Catalan</i> i, Alp Öktem, Alex Peiró-Lilja, Santiago Pascual, Mireia Farrús - Interspeech, Shanghai, China (Online)	
25 authors from	achine Translation For Africa n Masakhane ricaNLP Workshop organized within ICLR, Addis Ababa, Ethiopia (Online)	
<i>Tigrinya Neural I</i> Alp Öktem, Mi	Aachine Translation with Transfer Learning for Humanitarian Response 'ko Plitt, Grace Tang ricaNLP Workshop organized within ICLR, Addis Ababa, Ethiopia (Online)	
Prosodic phrase Alp Öktem, Mi	<i>alignment for machine dubbing</i> reia Farrús, Antonio Bonafonte 19 - Interspeech, Graz, Austria	
Building an oper Baybars Küleb	n source automatic speech recognition system for Catalan	
<i>Bilingual prosod</i> Alp Öktem, Mi	<i>ic dataset compilation for spoken language translation</i> reia Farrús, Antonio Bonafonte 8 - IberSPEECH, Barcelona, Spain	
<i>Visualizing punc</i> Alp Öktem, Mi	tuation restoration in speech transcripts with Prosograph reia Farrús, Antonio Bonafonte 18 - Interspeech, Hyderabad, India	
Attentional para Alp Öktem, Mi	lel RNNs for generating punctuation in transcribed speech reia Farrús, Leo Wanner - Statistical Language and Speech Processing (SLSP), Le Mans, France	
Alp Öktem, M	ool for prosody visualisation of large speech corpora ireia Farrús, Leo Wanner - Interspeech, Stockholm, Sweden	
Automatic extra Alp Öktem, M	ction of parallel speech corpora from dubbed movies ireia Farrús, Leo Wanner Workshop on Building and Using Comparable Corpora (BUCC) organized within A(.CL,