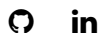


# JOSH MEYER

joshua.richard.meyer@gmail.com

jrmeyer.github.io



*I'm a PhD candidate passionate about machine learning and open-source technologies for low-resource languages.*

*Currently based in San Francisco.*

## EDUCATION

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<b>University of Arizona</b> Ph.D. in Linguistics (focus: <i>computational linguistics</i> )	Expected 2019 <i>Tucson, AZ</i>
<b>University of Arizona</b> M.A. in Linguistics	May 2015 <i>Tucson, AZ</i>
<b>Seton Hall University</b> B.A. in Liberal Studies	May 2012 <i>South Orange, NJ</i>

## WORK EXPERIENCE

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<b>Mozilla Machine Learning</b> NSF-Sponsored Internship <i>Developing end-to-end Automatic Speech Recognition techniques with Transfer Learning and deep neural networks (i.e. DeepSpeech).</i>	October 2018 — Present
<b>Various Companies</b> Kaldi & ASR Consultant <i>Optimized Automatic Speech Recognition pipelines for various companies using the Kaldi toolkit.</i>	2016 — 2018

## OPEN SOURCE WORK

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<b>Mozilla DeepSpeech</b>	<i>Added Transfer Learning branch</i>	[Code]
<b>NVDA</b>	<i>Added Kyrgyz language to screen reader</i>	[Code]
<b>eSpeak NG</b>	<i>Added Kyrgyz language to speech synthesizer</i>	[Code]
<b>Autotrace</b>	<i>Created tools for tongue contour vizualization</i>	[Code]

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**RESEARCH EXPERIENCE**


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**CNRS-LIMSI***Visiting Researcher*

July 2016 — July 2017

*Orsay, France*

DNN acoustic model adaptation and RNN text augmentation techniques

**American University of Central Asia***Visiting Research Scholar*

June 2015 — August 2015

*Bishkek, Kyrgyzstan*

Created a spoken corpus of the Kyrgyz language

**Arizona Phonological Imaging Lab***Research Assistant*

Spring 2015

*Tucson, AZ*

Developed software to process ultrasonic images

**American University of Central Asia***Visiting Research Fellow*

August 2013 — March 2014

*Bishkek, Kyrgyzstan*

Conducted acoustic-phonetic and phonological research

**Language Acquisition Research Center at Hunter CUNY***Research Assistant*

November 2011 — August 2012

*New York, NY*

Transcribed spontaneous speech; Aided in website construction

**KIT/NYU MEG Lab at NYU***Research Assistant*

May 2012 — August 2012

*New York, NY*

Aided in data analysis and processing

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**GRANTS & AWARDS**


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**NSF INTERN Grant***Approx. \$50,000*

2018

*National Science Foundation***Chateaubriand STEM Fellowship**

€5,000

2016

*French Embassy to the United States of America***GROW Travel Award**

\$5,000

2016

*National Science Foundation***Graduate Research Fellowship***Approx. \$102,000 + \$36,000 (tuition)*

2015-2018

*National Science Foundation***Visiting Research Fellowship***\$5,000*

August 2013 — March 2014

*Central Asian Studies Institute, American University of Central Asia***Regents Scholarship***\$111,140 (tuition)*

August 2008 — May 2012

*Seton Hall University*

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**PUBLICATIONS**


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- (2018) Meyer, Joshua. **Unsupervised Task Discovery for Multi-Task Acoustic Modeling.** Proceedings of the Machine Learning in Speech and Language Processing Workshop. [Poster] [Paper]
- (2018) Meyer, Joshua, and Kloehn, Nick, and Carnie, Andrew. **The Field is not the Lab, and the Lab is not the Field: Experimental linguistics and endangered language communities.** *Insights from Practices in Community-Based Research: From Theory To Practice Around The Globe*, ISBN: 978-3-11-052701-8 Edited by Shannon Bischoff and Carmen Jany. Mouton De Gruyter
- (2018) Bekmurzaev, Nurbek, and Lottholz, Philipp, and Meyer, Joshua. **Navigating the safety implications of doing research and being researched in Kyrgyzstan: cooperation, networks and framing.** *Central Asian Survey*, 37:1, 100-118, DOI: 10.1080/02634937.2017.1419165
- (2017) Meyer, Joshua. **Development of a Kyrgyz Speech Synthesizer: A Demonstration of the Ossian Frontend and Merlin Neural Network Speech Synthesis Toolkit.** *Proceedings of The 5th International Conference on Computer Processing of Turkic Languages*, Vol. 1, 130-136.
- (2016) Lottholz, Philipp, and Meyer, Joshua. **Friend or Foreign Agent? On the Limits of Field Research in Post-Soviet Kyrgyzstan.** *Exeter Central Asian Studies Network*.
- (2016) Meyer, Joshua. **Conducting Linguistic Fieldwork in Kyrgyzstan.** *Arizona Anthropologist*, Vol. 27.

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**PRESENTATIONS**


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- Language Technologies in Central Asia: A Survey.** Joint ESCAS-CESS Conference at the American University of Central Asia. 2017, Bishkek
- w/ Quam, Carolyn **Predicting Language Dominance in Kyrgyz-Russian Bilinguals.** Arizona Linguistics Circle 9. 2015, Tucson
- w/ Quam, Carolyn, and Bever, Thomas **Phonological processing in Kyrgyz-Russian bilinguals.** The Miniconference on Metrical Structure: Acquisition and processing. 2014, Utrecht
- The Kyrgyzstan corpus project: Building a language resource unique to Kyrgyzstan and available to all.** CASI Public Seminar at the American University of Central Asia. 2014, Bishkek
- Now you hear it, now you dont: Phonological processing in Kyrgyz-Russian bilinguals.** CASI Public Seminar at the American University of Central Asia. 2013, Bishkek
- Psycholinguistics: Thinking about language differently.** Lecture conducted at The Plattform at Werkstatttraum. 2013, Berlin

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## EVENT ORGANIZAION

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w/ Anguelina Popova, Fran Tyers **Kyrgyz Voice Technology Hackathon** [LINK] Attended by undergraduate students as well as professional developers *2019, American University of Central Asia (Bishkek)*

w/ Fran Tyers **Speech Synthesis Workshop: Hands-on with Merlin & Ossian** [LINK] Delivered to Faculty and Graduate Students in the Computational Linguistics Department *2018, Higher School of Economics (Moscow)*

w/ Fran Tyers **Speech Recognition Workshop: Hands-on with Kaldi & DeepSpeech** [LINK] Delivered to Faculty and Graduate Students in the Computational Linguistics Department *2017, Higher School of Economics (Moscow)*

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	Python, Bash, MATLAB, Perl, R
<b>Other</b>	Kaldi, TensorFlow, Linux, Amazon Web Services, git & GitHub

## LANGUAGE SKILLS

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<b>Native</b>	English
<b>Fluent</b>	Russian, French
<b>Some Knowledge</b>	German, Spanish, Italian, Kyrgyz

## TUTORIALS

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[TensorFlow]	[Kaldi]	[CMU-Sphinx]	[Merlin]	[eSpeak NG]	[Praat]
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