Elizabeth E. Salesky

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EDUCATION Johns Hopkins University

Baltimore, MD Ph.D. in Computer Science Aug 2019 - Present

Carnegie Mellon University Pittsburgh, PA

M.S. in Language Technologies May 2019

Advisor: Alex Waibel

Dartmouth College Hanover, NH

B.A. in Mathematics and Linguistics June 2012

Honors Thesis: "A Current Analysis of Unsupervised Morphological Induction Models"

Awards

Women in Defense HORIZONS Scholarship 2018-2019 **IEEE SPS Travel Grant** 2018 2012 Honors in Linguistics Citation in Intro to Computational Linguistics 2011

Additional Education

Massachusetts Institute of Technology, Speech Recognition Spring 2017 Fall 2015 Harvard Extension School, Chinese I July 2015 Linguistic Society of America, Summer School Massachusetts Institute of Technology, Cognitive Science Spring 2014

EXPERIENCE

Karlsruhe Institute of Technology

May-Aug. 2018

Mitarbeiter (Research Staff)

Karlsruhe, Germany

- Researched implicit removal of disfluencies in end-to-end speech translation
- Created new dataset to facilitate research and evaluation of this task

Karlsruhe Institute of Technology

Jun.-Aug. 2017

Mitarbeiter (Research Staff)

Karlsruhe, Germany

- Researched end-to-end models for speech-to-text translation
- Researched neural models for re-punctuation and casing between ASR and MT steps in SLT

MIT Lincoln Laboratory

Nov. 2012 - Jun. 2017

Associate Staff

Lexington, MA

- Researched novel alignment and inflection generation techniques for machine translation, trained competitive speech and text translation systems for international evaluation campaigns
- Researched adaptation techniques for translation with limited parallel data
- Wrote webservice for online text difficulty assessment application
- Supervised summer intern on topic classification project

Assistant Staff

- Incorporated linguistic features into machine translation models
- Defined features for a language-independent text readability assessment system
- Created an interface for an audio keyword searching system; ran Mechanical Turk experiments to determine user efficacy with different amounts of training data

RosettaProject Jun.-Aug. 2012

Summer Intern

San Francisco, CA

 Created an application to upload files from Record-a-thons to RosettaProject's Internet Archive collection, using the Internet Archive API

Logic and Language Course

Winter 2012, Spring 2012

Teaching Assistant

Hanover, NH

• Tutored undergrads in first-order logic, held tutorials 3 times weekly, and graded student work

SKILLS Programming Languages: Python, Scala, Julia, Matlab, HTML/CSS, Javascript

Natural Languages: English (native), Spanish (proficient), German (limited)

Software: LATEX, Moses, Praat

SERVICE Reviewer: ACL (2020,2018), EMNLP (2019, 2018), WMT (2019, 2018), IWSLT (2019, 2018), NLPTEA

(2018, 2017), BEA (2017, 2015)

Evaluation Committee: IWSLT (2020, 2019), SIGMORPHON (2020), SIGTYP (2020)

Volunteer: TechNights, Cambridge Literacy Project, Girls Who Code, Girls Who Build, Food For Free

PUBLICATIONS E. Salesky, A.W. Black. "Phoneme Features Improve Speech Translation." ACL. 2020.

E. Salesky, E. Chodroff, T. Pimentel, M. Wiesner, R. Cotterell, A.W. Black, J. Eisner. "A Corpus for Phonetic Typology." *ACL*. 2020.

Clara Meister, E. Salesky, Ryan Cotterell. "Generalized Entropy Regularization or: There's Nothing Special about Label Smoothing." *ACL*. 2020.

J. Niehues, R. Cattoni, S. Stüker, M. Negri, M. Turchi, Thanh-Le Ha, **E. Salesky**, R. Sanabria, L. Barrault, L. Specia, M. Federico. "The IWSLT 2019 Evaluation Campaign." *IWSLT*. 2019.

E. Salesky, M. Sperber, A.W. Black. "Exploring Phoneme-Level Speech Representations for End-to-End Speech Translation." *ACL*. 2019.

E. Salesky, M. Sperber, A. Waibel. "Fluent Translations from Disfluent Speech in End-to-End Speech Translation." *NAACL*. 2019.

E. Salesky, A. Runge, A. Coda, J. Niehues, G. Neubig. "Optimizing Segmentation Granularity for Neural Machine Translation." *Machine Translation*. 2020. arXiv:1810.08641 Oct. 2018.

E. Salesky, S. Burger, J. Niehues, A. Waibel. "Towards Fluent Translations from Disfluent Speech." *SLT*. 2018.

F. Dessloch, T.L. Ha, M. Müller, J. Niehues, T.S. Nguyen, N.Q. Pham, **E. Salesky**, M. Sperber, S. Stüker, T. Zenkel, A. Waibel. "KIT Lecture Translator: Multilingual Speech Translation with One-Shot Learning." *COLING*. 2018.

E. Salesky, J. Ray, W. Shen. "Operational Assessment of Keyword Search on Oral History." *LREC*. 2016.

E. Salesky, W. Shen, "Exploiting Morphological, Grammatical, and Semantic Correlates for Improved Text Difficulty Assessment." *BEA* Workshop at ACL. 2014.

W. Shen, J. Williams, T. Marius, E. Salesky, "A Language-Independent Approach to Automatic Text Difficulty Assessment for Second-Language Learners." *PITR* Workshop at ACL. 2013.

SHARED TASKS A. Chaudhary, **E. Salesky**, G. Bhat, D. Mortenson, J. Carbonell, Y. Tsvetkov. "CMU-01 at the SIGMOR-PHON 2019 Shared Task on Crosslinguality and Context in Morphology." *SIGMORPHON*. 2019.

NQ. Pham, M. Sperber, E. Salesky, TL. Ha, J. Niehues, A. Waibel. "KIT's Multilingual Neural Machine Translation systems for IWSLT 2017." IWSLT. 2017.

J. Gwinnup, T. Anderson, G. Erdmann, K. Young, M. Kazi, **E. Salesky** B. Thompson, J. Taylor. "The AFRL-MITLL WMT17 Systems: Old, New, Borrowed, BLEU." *WMT*. 2017.

M. Kazi, E. Salesky, B. Thompson, J. Taylor, J. Gwinnup, T. Anderson, G. Erdmann, E. Hansen, B. Ore, K. Young, M. Hutt. "The MITLL-AFRL IWSLT 2016 Systems." *IWSLT*. 2016.

J. Gwinnup, T. Anderson, G. Erdmann, K. Young, M. Kazi, E. Salesky, B. Thompson. The AFRL-MITLL WMT16 News-Translation Task Systems. *WMT*. 2016.

- M. Kazi, B. Thompson, E. Salesky, T. Anderson, G. Erdmann, E. Hansen, B. Ore, J. Gwinnup, K. Young, M. Hutt, C. May. "The MITLL-AFRL IWSLT 2015 Systems." *IWSLT*. 2015.
- J. Gwinnup, T. Anderson, M. Kazi, E. Salesky, G. Erdmann, K. Young, B. Thompson, C. May. "The AFRL-MITLL WMT15 System." WMT. 2015.
- M. Kazi, E. Salesky, B. Thompson, J. Ray, M. Coury, W. Shen, T. Anderson, G. Erdmann, J. Gwinnup, K. Young, B. Ore, M. Hutt. "The MIT-LL/AFRL IWSLT-2014 MT system." *IWSLT*. 2014.
- M. Kazi, M. Coury, E. Salesky, J. Ray, W. Shen, T. Gleason, T. Anderson, G. Erdmann, L. Schwartz, B. Ore, R. Slyh, J. Gwinnup, K. Young, M. Hutt. "The MIT-LL/AFRL IWSLT-2013 MT system." *IWSLT*. 2013.