

Enno Hermann

Research assistant, MSc Speech & Language Processing graduate.

Starting a PhD in pathological speech recognition at the Idiap Research Institute/École polytechnique fédérale de Lausanne in July 2018, supervised by Mathew Magimai Doss.

EXPERIENCE

- SEP 2017 - PRESENT **University of Edinburgh** — Research Assistant (PI: Sharon Goldwater)
I investigate unsupervised approaches to learn better feature representations from raw speech alone that can be used in zero-resource speech applications or modelling of child language acquisition. My current focus is on unsupervised speaker adaptation and transfer learning from high-resource languages. The main technologies I'm using are Python, Bash, Kaldi and Theano.
- JUN 2016 - AUG 2016 **Google, Mountain View** — Intern, Natural Language Understanding Research
I worked on unsupervised coreference resolution using TensorFlow, Python and C++.
- MAY 2015 - AUG 2015 **Google, London** — Intern, Text-to-Speech Research
I wrote a database and querying library for analyzing voice corpora in C++.
- MAY 2014 - AUG 2014 **Google, Dublin** — Site Reliability Engineering Intern, Content & Display Ads
I improved monitoring metrics and created a monitoring dashboard for a service in the AdSense infrastructure.

EDUCATION

- SEP 2016 - AUG 2017 **University of Edinburgh** — MSc in Speech & Language Processing (*Distinction*)
Core modules: Automatic Speech Recognition, Natural Language Understanding, Machine Learning & Pattern Recognition, Machine Translation.
MSc dissertation: **Zero-resource speech technology** - Supervisor: Sharon Goldwater
I worked on iteratively improving unsupervised spoken term discovery and acoustic feature representations from raw speech in a zero-resource setting for multiple languages of the GlobalPhone corpus.
- SEP 2012 - MAY 2016 **Trinity College Dublin** — BA in Computer Science, Linguistics and French (*First-class honours*)
BA dissertation: **Bilingual Irish-English speech synthesis** - Supervisor: Christer Gobl
I added word-level language identification and bilingual synthesis to the Irish TTS system [Abair](#) as Irish sentences often contain English fragments as well.
- SEP 2014 - MAY 2015 **Université Stendhal, Grenoble** — Visiting Erasmus exchange student
I took Master-level courses in Natural Language Processing and Linguistics (all taught in French).

TEACHING

FEB 2018 - APR 2018

Cognitive Science — Tutor

Introduction to cognitive science course for first year undergraduates.

SEP 2017 - DEC 2017

Accelerated Natural Language Processing — Tutor

Master's level course covering a wide range of topics in NLP.

JUL 2017

LxMLS - Lisbon Machine Learning School — Lab tutor

Summer school on machine learning for NLP. I helped students in practical lab sessions with Python and Theano exercises that focused on NLP applications.

PERSONAL PROJECTS & VOLUNTEERING

SEP 2016 - AUG 2017

MSc Speech & Language Processing — Class Representative

As class representative I collected and passed on feedback from students, represented them in school meetings and acted as a liaison between staff and students of the programme.

MAR 2015 - PRESENT

AnkiDroid ([GitHub](#)) — Core Contributor

Spaced-repetition flashcard learning app for Android with 1+ million downloads.

- ❖ I initiated and made large parts of the user interface update to Material Design.
- ❖ I contribute occasional bug fixes, translations, and regular user support.

LANGUAGES

- ❖ Python, Java, C++, Bash.
- ❖ German (native), English, French, Lithuanian, Serbo-Croatian.

TOOLKITS

- ❖ Deep learning: Pylearn2/Theano, PyTorch, TensorFlow
- ❖ Speech recognition: Kaldi, HTK
- ❖ Speech synthesis: Festival, HTS

AWARDS

Highly Commended Dissertation prize, MSc Speech & Language Processing (2017).

Foundation Scholarship of Trinity College Dublin for academic excellence (2014-2019).

1st place at the Irish Collegiate Programming Contest (2014).

