Introduction to NLP

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Edward C. Zimmermann <edz@nonmonotonic.net>

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Nonmonotonic Labs / ExoDAO Network Association / re-Isearch

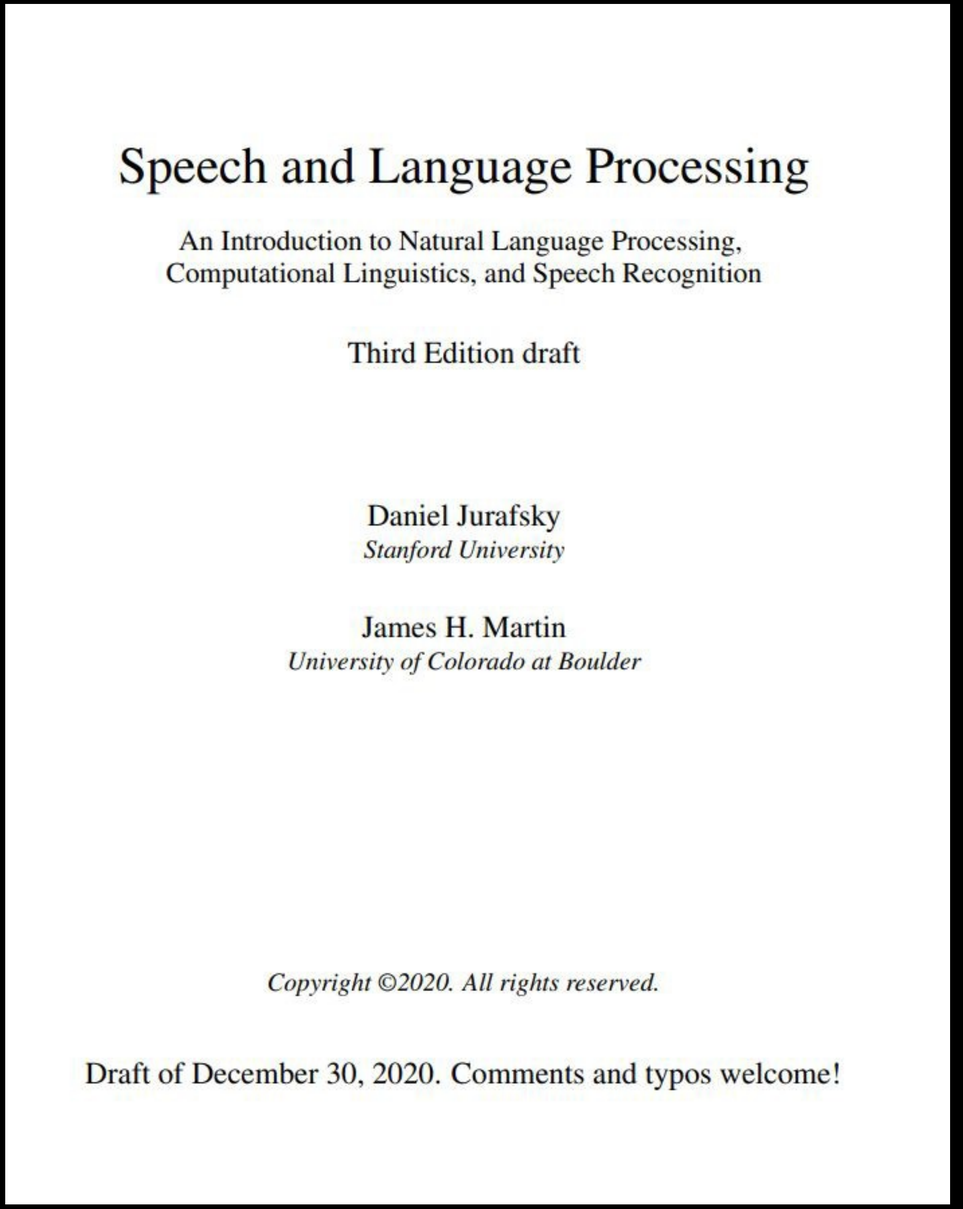
In computer networking experience reaches back to the early days of the ARPAnet when he found himself as a teen with a shared office in UCLA's Boelter Hall. He came to West Berlin in the early 1980s to work at the WZB (Science Center Berlin) IIVG (International Institute for Comparative Social Research) under Prof Karl Deutsch (Harvard)— gradient descent applied to natural networks was first proposed by his Phd student Paul Webos at Harvard (1982). He then ended up in Munich as a research director at Infratest studying the market potential for IT that could potentially be developed. Fast forward to 1992 he tried to launch an Internet tablet computer when logically founded of one of the first ISPs in Germany and was one of the earliest contributors to the WWW.

A dominant focus of Ed's R&D over the past 20+ years has been text retrieval, metadata, data mining, knowledge discovery, pattern recognition, NLP and machine learning. He has been a part of many publicaly funded projects, worked with German, EU and UN organizations and collaborated with a number of research institutes and national scientific agencies. His name is also associated with a large number of open source software packages. He has spoken at a number of conferences including several GTCs (NVIDIA's GPU Conference) as well as FOSDEMs (the largest open source conference in the world).

His current projects for the public good have received numerous grants from the European Union (Next Generation Initiative), German research (BMBF) as well as the Mercator Foundation (Switzerland).

Relevant to this course is Edward's engine: re-Isearch., a novel multimodal search and retrieval engine using mathematical models and algorithms different from the all-too-common inverted index. It is fully open source and has received funds from the EU NGI Program as well as the Prototype Fund Germany.
http://www.re-iserch.org

Since 2022 he has been a founding board member of the ExoDAO Network Association (Zurich). Based around the SPH of ETH Zurich the aim of the association is to create a crowd alternative to Big Tech search and empower the digital commons.



Speech and Language Processing

An Introduction to Natural Language Processing,
Computational Linguistics, and Speech Recognition

Third Edition draft

Daniel Jurafsky
Stanford University

James H. Martin
University of Colorado at Boulder

Draft of December 30, 2020. Comments and typos welcome!

web.stanford.edu/~jurafsky/slp3/

Ingredients for success

The following covers the major components of the course..

- → **Intensive 2 days x 8 hours per day. 1 half day (Thursday), half-day, homework (after course) followed by online session(s).**
- → **Lectures/Discussions: ~3 hours/day**
- → **Labs: 3-4 hours/day**
- → **Project: T.B.A.**