# **Tovly Deutsch**

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#### **EDUCATION**

# **Harvard University**

Cambridge, MA

A.B. in Computer Science and Linguistics.

May 2020

Honors: Magna Cum Laude in Field (GPA: 3.92). High Honors. John Harvard Scholar.

**Thesis:** Linguistic Features for Readability Assessment

**Coursework**: Advanced Machine Learning (graduate), Data Structures & Algorithms, Computational Photography, Cloud Computing, Systems Programming, Linear Algebra, Phonological Theory, Probability.

### **SELECTED PUBLICATIONS**

## T. Deutsch, M. Jasbi, S. Shieber

# **Linguistic Features for Readability Assessment**

Oral Presentation. [To appear in] Proceedings of the 15th Workshop on Innovative Use of NLP for Building Educational Applications (ACL 2020)

A. Saleh, T. Deutsch\*, S. Casper\*, Y. Belinkov, S. Shieber

## **Probing Neural Dialog Models for Conversational Understanding**

Oral Presentation. [To appear in] Second Workshop on NLP for Conversational AI (ACL 2020)

#### **EXPERIENCE**

**Facebook** 

Menlo Park, CA

### **Software Engineer Intern**

May – Aug 2019

- Expanded Oculus referrals by exposing on surfaces using React Native, React, and Redux.
- Designed and implemented native share sheet functionality for sending referrals in the Oculus app.

Etsy New York, NY

## **Software Engineer Intern**

Jun - Aug 2018

- Improved listing quality by extracting structured data for editing nudges using React and Redux.
- Experimented with customer photos by building a photo section for listing pages using PHP and JS.

### **EDM Enterprises**

# **Contract Software Engineer**

May – Dec 2017

Developed an asset tracking & reporting system for medical waste containers using CodeReadr APIs.

#### SELECTED PROJECTS

## **Learning Constraint Rankings with Sequence to Sequence Models**

Oct - Dec 2019

• Used sequence to sequence models to learn constraint rankings in Optimality theory.

## **Analyzing Phonological Surfeit of the Stimulus in Neural Models**

Mar - May 2020

• Explored the ability of language models to learn phontactic surfeit of the stimulus phenomena.

### **Network Visualizer**

Apr - May 2018

• Used Mininet and Ryu to create a tool for monitoring and debugging complex network traffic.

#### **TECHNICAL SKILLS**

Languages: Python, C++, OCaml, C, R, Javascript, PHP

Technologies: PyTorch, Fairseq, ParlAI, Keras, Halide, scikit-learn, React