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

EXPERIENCE

Meta
IC5 Software Engineer, Portal AI & Reality Labs   Sep 2020 - Present
- Developed and optimized scene understanding ML and computer vision pipelines.
- Developed a new Rust-based node agent for a client-server session management system.
- Contributed to computer vision features along all stages of development, including specifying data collection, annotation, model experimentation, and integration into mobile and cloud hardware.
- Created computer vision prototypes to inform hardware and product roadmaps.
- Architected and implemented a client-aggregated logging system for analytics on sensitive features.
- Prototyped bringing ML-based features to browsers using WASM and WebGL.
- Created one-command deployment for a distributed system, covering many configurations that previously required lengthy manual steps.

Facebook   Menlo Park, CA
Software Engineer Intern   May – Aug 2019
- Expanded Oculus referrals by exposing on multiple surfaces and native share sheets.

Etsy   New York, NY
Software Engineer Intern   Jun – Aug 2018
- Improved listing quality by extracting structured data for automated editing suggestions.
- Created a customer photos viewer shown on every product page.

SELECTED PUBLICATIONS

T. Deutsch , M. Jasbi, S. Shieber
Linguistic Features for Readability Assessment
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. Second Workshop on NLP for Conversational AI (ACL 2020)

SELECTED PROJECTS

Learning Constraint Rankings with Sequence to Sequence Models   Oct – Dec 2019

Analyzing Phonological Surfeit of the Stimulus in Neural Models   Mar – May 2020

TECHNICAL SKILLS

Technologies: C++, Python, Rust, Java, Kotlin, PyTorch, TensorRT, Halide, Javascript, PHP