

Irem Ergun

CONTACT INFORMATION

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EDUCATION

University of California, Riverside, CA USA **September, 2018 - December 2022**
- Ph.D. Candidate - CSE (dropped out with an M.Sc. to pursue exciting industry opportunities)

- Privacy preserving, efficient, distributed ML research and 3.83 GPA
- TA for Algorithms(CS141), Web Development(CS6), Discrete Math(CS111) for 200+ students.

Bilkent University, Ankara, Turkey **September 2013 - June 2017**
-B.Sc., Computer Science, GPA: 3.36

WORK EXPERIENCE

Cohere, Remote **January, 2023 - present**
Member of Technical Staff - Post Training

- Working on improving instruction following capabilities and long context performance of LLMs.
- Researching new RL paradigms and improving offline and online RL algorithms.
- Was a key contributor to Command R, [which was deemed as one of the Best Inventions of 2024 by TIME Magazine](#).
- Was pivotal in developing the Command A model, which [consistently matches or surpasses GPT-4o in performance across a wide range of tasks](#).

BoardClic, Stockholm, Sweden **May, 2021 - August 2021**
Machine Learning Consultant
Developed an NLP based data processing tool to unify heterogenous datasets to be used in the downstream. Worked solo during design, led the software engineering team during implementation.

PROFESSIONAL SKILLS

Programming Languages: Python, C++, SQL, R
Frameworks and Libraries: PyTorch, Keras, Jax, AWS/Google Cloud infra

SELECTED RESEARCH PAPERS

- [ShiQ: Bringing back Bellman to LLMs](#) (Accepted at NeurIPS'25)
- [Command A: An Enterprise-Ready Large Language Model](#)
- [Aya Dataset: An Open-Access Collection for Multilingual Instruction Tuning](#) (*Accepted at ACL'24*)
- [Communication-Efficient Secure Aggregation for Federated Learning](#) (*Accepted at GLOBE-COM2022*)
- [Secure Aggregation for Privacy-Aware Federated Learning with Limited Resources](#) (*Accepted at ICLR'22 SRML workshop*)
- [Sparsified Secure Aggregation for Privacy-Preserving Federated Learning](#)

SELECTED PROJECTS

Understanding microaggressions **2021**
Developed the first microaggression classifier in Turkish. Using it as the showcase, hosted a [lecture](#) about NLP basics for the non-profit organization called Delta Analytics.
Music Genre Classifier using CNNs **September 2018 - December 2018**
Converted chromagrams (time-frequency representation) of songs into images and used CNNs to classify the images into genres. Got 70% and outperformed baselines by 3.5x. Code is [on GitHub](#).
Breast cancer classification **January 2017 - June 2017**
Developed semi-supervised learning methods to classify different types of breast cancer using genomics data. Selected as the best undergraduate research project of the semester.
Pathy: Turkish sentiment analysis platform for Twitter (Senior Project) **2016 - 2017**
Worked as a part of 5 person team, conceived initial idea, and designed and took part in implementing the final solution, the code of which is [on GitHub](#). Received the Innovation Award.

HONORS AND AWARDS

Global Teaching Fellow Scholarship, Delta Analytics, San Francisco, CA USA
Full Scholarship, University of California, Riverside, CA USA
Merit-Based Scholarship, Bilkent University, Ankara, Turkey