# Kerem Zaman

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#### **EDUCATION**

# The University of North Carolina at Chapel Hill

Chapel Hill, NC, USA

PhD in Computer Science (2022 - Present) Advisor: Prof. Shashank Srivastava

Boğaziçi University Istanbul, Turkey

BSc in Computer Engineering (2018 - 2022)

GPA: 3.21

#### RESEARCH INTERESTS

Interpretable and explainable machine learning, large language models, multilingual NLP, fairness

#### **PUBLICATIONS**

# Fuse to Forget: Bias Reduction and Selective Memorization through Model Fusion

Kerem Zaman, Leshem Choshen, Shashank Srivastava

Under Review

#### MaNtLE: Model-agnostic Natural Language Explainer

Rakesh R Menon, Kerem Zaman, Shashank Srivastava

Under Review

### A Multilingual Perspective Towards the Evaluation of Attribution Methods

Kerem Zaman, Yonatan Belinkov

**EMNLP 2022** 

# Rank in Style: A Ranking-based Approach to Find Interpretable Directions in StyleGAN

Umut Kocasari\*, Kerem Zaman\*, Mert Tiftikci\*, Pinar Yanardag

CVPR 2022 5th Workshop on Computer Vision for Fashion, Art, and Design

## BURST: Software and Simulation Solutions of an Autonomous Vehicle

Fatih Köse, İbrahim Özcan, Melih Dal, Metehan Yıldırım, , Kadir Türksoy, Kerem Zaman, Tuna Meral, Sinan Öncü 2020 28th Signal Processing and Communications Applications Conference (SIU), Gaziantep, Turkey, pp. 1-4

## RESEARCH EXPERIENCE

**UNC-NLP** Chapel Hill, NC, USA

Graduate Research Assistant | Advisor: Shashank Srivastava

Working on explainable NLP, interpretability and fairness, model fusion

# CATLAB at Bogazici University

Istanbul, Turkey

August 2022 - Present

Undergraduate Research Assistant | Advisor: Pinar Yanardag

October 2021 - June 2022

Worked on improvement of text-based image manipulations for GANs by utilizing automatically extracted masks and improved text generation strategies

#### **Independent Research**

supervised by Yonatan Belinkov

April 2021 - June 2022

Working on evaluating wide variety of attribution methods on the NLI task along with introducing a novel method for faithfulness evaluation

#### **Independent Research**

supervised by Tolga Birdal

Software Engineer Intern

September 2021 - September 2022

Working on Riemannian replacement of GANs and the concepts like interpolation, random walk and latent manipulation

DeepPavlov.ai Remote

Research Intern August - November 2021

Worked on improvement of the multilingual models by introducing a new loss function

# PROFESSIONAL EXPERIENCE

**PragmaCraft** Istanbul, Turkey

Software Engineer March 2020 - June 2022 July 2018 - March 2020

- Worked on design, implementation and optimization of retrieval and question-answering modules of intelligent search assistant product
- Worked on abstractive summarization for Turkish texts
- Worked on text classification for redirecting the applications about COVID-19 related issues to the related departmens for ISBANK (one of the largest banks in Turkey)
- Worked on the backend development of various services

## PROFESSIONAL SERVICE

• Reviewer at Workshop on Data Science with Human in the Loop (DaSH), EMNLP 2022

## **SKILLS**

- Programming Languages: Python, C/C++
- Technologies: Git, ROS, Gazebo, MongoDB, Docker
- Libraries: PyTorch, numpy, scikit-learn, OpenCV, Transformers
- Familiar with: HTML, CSS, Javascript, SQL, C#, Verilog, LaTeX, AWS
- Human Languages: Turkish (native), English (advanced), Laz (elementary), Ancient Egyptian (elementary), German (elementary)

# **PROJECTS**

• Bogazici University Robotic Systems Team Autonomous EV project (2018 - 2022):
Led Autonomous Software Team between 2020-2022, developed path planning and control systems, took part in traffic sign detection module, realized and tested them in simulation environment and on the real vehicle.

## ADDITIONAL EXPERIENCE & ACHIEVEMENTS

- · Most Original Software Award for Unique Vehicle Category at Teknofest Robotaxi-Full Scale Autonomous Vehicle Competition 2021
- 1st place in Preliminary Design and Simulation Stage at Teknofest Robotaxi-Full Scale Autonomous Vehicle Competition 2019 & 2020
- 242nd place among 2M+ students in University Entrance Exam (2018)
- 3rd place in Istanbul-Asia Region in TUBITAK (Scientific and Technological Research Council of Turkey) Research Projects Challenge for High School Students
- · Gave introductory programming courses in high school organizations