Ibrahim Taha Aksu

Curriculum Vitae

NUS | AS6
04-13 Computing 1, 13, Singapore 117417
✆ *(+65) 87833981*
✉ *taksu@u.nus.edu*

Education

2019–Present **National University of Singapore - School of Computing**, *Ph.D. Candidate*, Computer Science, *CAP: 4.58/5.*

2014–2019 **Ihsan Dogramaci Bilkent University**, *Bachelors of Science*, Computer Science, *CGPA: 3.75/4.*

2010–2014 **Cagribey Anatolian High School**.

Research Interests

I am enthusiastic about domain adaptation of NLP models in a low-resource scheme, *currently in task-oriented dialogue modality. Thus I am mostly interested in searching for effective transfer learning methods that would help language models perform well across various domains. Practically I aim to build models that are robust and able to adapt to a target domain via few-shot or zero-shot training. Motivated by this aim, I study various concepts such as data augmentation, meta learning, parameter-efficient learning, prompt engineering etc.*

Publications

Graduate Work

Fall 2022 **Taha Aksu**, *TBA. Prompter: Zero-shot Adaptive Prefixes for Dialogue State Tracking Domain Adaptation (ACL 2023).*

Spring 2022 **Taha Aksu**, *Zhengyuan Liu , Min-Yen Kan, Nancy F. Chen. N-Shot Learning for Augmenting Task-Oriented Dialogue State Tracking. (ACL Findings 2022).*

Fall 2021 **Taha Aksu**, *Zhengyuan Liu , Min-Yen Kan, Nancy F. Chen. Velocidapter: Task-oriented Dialogue Comprehension Modeling Pairing Synthetic Text Generation with Domain Adaptation. (SIGDIAL 2021).*

Undergraduate Work

Fall 2019 **Taha Aksu**, Nancy F. Chen, Luis F. DHaro, Rafael Banchs. Reranking of responses using transfer learning for a retrieval-based chatbot (IWSDS 2019).

Professional Experience

Fall 2023–
Spring 2023 **Applied Scientist Intern**, AMAZON, San Francisco Bay Area, U.S..
Working to improve state-of-the-art large language model systems on down-stream tasks for both open-domain and task-oriented dialog modalities.

Fall 2018– Summer 2019	**Part-Time Software Engineer**, Milsoft, Ankara/Turkey. Our team aimed to train a swarm of UAVs, through image recognition and reinforcement learning, to autonomously scan an area and find/pursue targets.
Summer 2018	**Intern**, A*STAR- Institute for Infocomm Research, Singapore. Participated in an internship program at A*STAR as a research fellow. Worked on an open-domain chatbot response re-ranker. Findings published in the form of a workshop paper at IWSDS'19.
Summer 2017	**Intern**, Kocsistem, Ankara/Turkey. Participated in an internship program at Kocsistem in the department of Technology Platforms-Data Layer as a software engineer.

Teaching Experience

Fall/Spring 2020	**Teaching Asistant**, CS3219 - Software Engineering Principles and Patterns, NUS, Singapore.
Summer 2017	**Teaching Assistant**, Summer AI Camp, Bilkent, Ankara/Turkey. Worked as teaching assistant/tutor in a summer camp for AI that took place at Bilkent University.
Spring 2017	**Teaching Assistant**, CS224- Computer Architecture Lab, Bilkent, Ankara/Turkey. Worked as a tutor in a CS224-Computer Architecture laboratory. Helped other students as being experienced in System verilog, vivado environment and MIPS assembly language, read students preliminary reports of lab and graded them.
Fall 2016	**Teaching Assistant**, CS223- Digital Design lab, Bilkent, Ankara/Turkey. Worked as a tutor in a CS223-Digital Design laboratory. Helped other students as being experienced in system verilog, vivado environment and digital circuitry, read student's lab reports and graded them and also helped them with implementing their semester projects.

Awards / Honors

2019-2023	**SINGA**, A*STAR. Received The Singapore International Graduate Award.
Summer 2018	**SIPGA**, A*STAR. Received SIPGA Award which is a short-term research attachment for international students with top scores, at A*STAR- Singapore.
Spring 2017	**Merit Scholarship**, Bilkent. Received Bilkent University Merit Scholarship.
Spring 2014 – Spring 2018	**High Honor Certificate**, Bilkent. Received High Honor Certificate from Bilkent University.

Spoken Languages

Turkish	**Native**
English	**Proficient, TOEFL-IBT | 103**
Russian	**Intermediate**

Skills

Programing Languages	Python, Java, C++/C, Matlab, JavaScript, C#, HTML, CSS

Professinal Activities

2020-2021	**Reviewer**, IEEE-TAACL, ICSR, Neurocomputing.

Extracurricular Activities

Spring 2021	**WING NLP Seminar**, Organizing team, https://wing-nus.github.io/nlp-seminar/.
Fall 2019	**ASRU 2019**, Student volunteer.
Fall 2018	**PLMW 2018**, Programming Languages Mentoring Workshop Boston/USA.
Summer 2017	**Huawei**, Seeds for the Future program.
	Participated in the Seeds for the Future program with other 9 university students selected among Turkey.
Summer 2016	**Work & Travel**, IOWA / USA.