Ali Eren **Ak**

Computer Science and Engineering Student at Sabancı University

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Education

Sabanci University *Istanbul,Turkey* BACHELORS OF SCIENCE IN COMPUTER SCIENCE AND ENGINEERING *Sept. 2018 - Expected 2023*

• High Honor Scholarship: Scholarship meets the 100% of the tuition fee and provides a monthly stipend.

Namık Karamancı High School of Science *Antalya, Turkey* *Sept. 2014 - June 2018*

Projects

Background Linking on News Articles *Supervisor: Reyyan Yeniterzi* *June 2020 - Aug. 2020*

• Submitted two works to Background Linking and Wikification tasks in **Text Retrieval Conferences (TREC) 2020**.
• Ranked at the **#1** in **Wikification Task** according to NDCG@5 metrics. Doc2Vec, StanfordCoreNLP, ElasticSearch, BERT and Universal Sentence Encoder are used in TREC.
• Developed NLP models in Turkish using Zemberek, CRF, BERTurk, MultiBERT.
Report: https://drive.google.com/file/d/1CNJEEBvu2uFmvYqdih01lWnQlryVN3Sm/view?usp=sharing
Paper: https://trec.nist.gov/pubs/trec29/papers/SUNLP.N.pdf

iSemanticSpace *Apple Swift Student Challenge* *May 2020*

• Awarded by Apple in Swift Student Challenge 2020.
• Developed Swift Playground which gamifies a description of Semantic Spaces in a fun way. 2 interactive game scenes and 1 end scene are added using CoreML, NaturalLanguage frameworks.
Github: https://github.com/akalieren/iSemanticSpace

Image Segmentation for Question Detection from test book *Supervisor: Reyyan Yeniterzi* *Sept. 2019 - Jan. 2019*

OpenCV, detecting a question inside pages includes multiple questions in two columns, cleaning the dataset such noisy pages, unformatted pages, or outliers. Using Pytesseract, changing the format of question images from ".png" to ".txt" which is an analyzable format for future plans such as classification, text mining and analyzing algorithms for wrong questions.

Working Experiences

YAZI AI *Istanbul, Turkey* January *2021 - Present*   *NLP ENGINEER*

• Participating in projects which focus on Turkish Language Processing and NLP Applications.
• Developed various software, including backend and frontend, for the Machine Learning production and data collection.

University of Amsterdam - ILPS Research Group *Amsterdam, Netherlands* *Jun. 2021 -Sept. 2021*   RESEARCH ASSISTANT

• Supervised by Evangelos Kanoulas and Mohammad Alinnejadi
• Studied in Multi-task learning, transformers-based models in Attribute-Value Extraction.
• Tried several embedding techniques for attribute extraction, baselines are improved with taxonomy-added embedding.

Sabancı University - CS201 Introduction to Computation, *Istanbul, Turkey* *Sept. 2020 - Jan. 2021*   LEARNING ASSISTANT

• Arranged weekly preparation sessions and a training program for the course.
• Helped students who are getting difficulties in specific topics in my office hours.

Natural Language Processing Research Group, *Istanbul, Turkey* *June 2020 - December 2020*   RESEARCH ASSISTANT

• Participated in projects called Background linking on News articles.
• Experienced in crucial NLP concepts such as Named Entity Recognition, Conditional Random Fields, Transformers model.

Skills

Language Turkish (Native), English (Advanced)

Computer Swift, C/C++, Python, Dart, HTML/CSS/Javascript

Honors & Awards

2020	**Swift Student Challenge Winner** Apple	*California, U.S.A*
2020	**Dean's High Honor List** Sabancı University	*Istanbul, Turkey*
2019-2020	**Sabancı University Extracurricular Awards** Sabancı University	*Istanbul, Turkey*
2018-2023	**Sabancı University High Honor Scholarship** Sabancı University	*Istanbul, Turkey*
2018	**Antalya Chemistry Olympics** Akdeniz University	*Antalya, Turkey*

Volunteer Work

Civic Involvement Projects, Sabancı University *Istanbul, Turkey* PROJECT SUPERVISOR May *2019 - Present*

• Leading project group in CIP101 course every semester, accomplished projects in elementary school where we have 10-15 volunteers and 100-150 childrens.
• Organizing children day called "Sun Day" that 800-1000 students participated at the end of the semester.

kodluyoruz.org, *Istanbul, Turkey* CS50x FELLOW Oct. *2020 - Present*

• Being active in social enterprise which aims to decrease youth unemployment by teaching people for free.
• Participated as a Fellow in CS50x Harvard University Course by kodluyoruz.
• Helped students throughout the course by answering questions, arranged meetings.

Küçükköy Yaratıcı Teknolojiler Atölyesi (Creative Collaboration Space for Kids) *Balıkesir, Turkey* Sept. *2020 - Oct. 2020*

• Leading volunteering groups which held zoom sessions for kids who want to learn programming.
• Helping kids to gain computational skills in python, scratch and Turtle.

Discover Yourself *Muğla, Turkey* Jan. *2020 - Feb. 2020*

• Participated in volunteer group which having funny time with elementary kids
• Helping underprivileged children to see the world behind their town, dream to universal, and be motivated for the future.

AIESEC, Ain Shams University *Cairo, Egypt* EDUCATION VOLUNTEER *June 2019 - Aug. 2019*

• Being a voluntary buddy for Egyptian Orphans in their pretty house and playing games, watching films and doing homeworks with them, and especially teaching Turkish upon their lovely request.
• Participated in an Exchange Group which has 250 volunteers from 20 different countries.

Extracurricular activities

Sabancı University IEEE Student Branch *Istanbul, Turkey* Sept. *2018 - Present*

• Being active in the most popular engineering society in university as a Committee Chair, Computer Society President and Active Member.
• Organizing popular events, live sessions, and workshops that are mostly about Computer Science and Artificial Intelligence.
• Learned significant concepts about leadership, club activities, sponsorships, and business ethics.
• Leading study groups for Swift, Deep Learning and CS50x (Introduction to Computation, Harvard University course by kodluyoruz.com), workshops.
• ieeesabanci.org

Muzikus, Sabancı University Music Club *İstanbul, Turkey* May. *2018 - Present*

• Playing drums in club activities at the end of the year in a band.
• Attend weekly music sessions as a drummer.

Tea Talks With CEO's Club, Sabancı University *Istanbul, Turkey* Sept. *2018 - Present*

• Participated in small groups that weekly meet with leaders, managers and CEO's in all over the world.
• Listening to the CEO's experience, asking questions and taking stock of business.