

Ekin Akyürek

COMPUTER SCIENCE & ARTIFICIAL INTELLIGENCE LABORATORY, MIT

32 Vassar Street, 32-D393, Cambridge, Massachusetts, 02139

✉ akyurek@mit.edu | 🏠 ekinakyurek.me | 📷 ekinakyurek | 🌐 ekinakyurek

Education

Massachusetts Institute of Technology

PH.D. STUDENT IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

- Advisor: Prof. Jacob Andreas

Cambridge, MA

Sept 2019 - Present

Koç University

B.S. IN ELECTRICAL AND ELECTRONICS ENGINEERING; B.S IN PHYSICS

- Research Advisor: Prof. Deniz Yuret
- Summa Cum Laude; 2nd in University; 1st in Physics
- GPA: 4.07/4.30

Istanbul, Turkey

Sept 2013 - Feb 2019

Izmir Science High School

- Bronze Medal in International Physics Olympiad, 2013

Izmir, Turkey

Sept 2009 - Feb 2013

Publications

Research Experience

Computer Science & Artificial Intelligence Laboratory, MIT

PHD STUDENT

- Working on (compositional) generative modeling for data augmentation in language with Prof. Jacob Andreas

Cambridge, MA

Sept 2019 - Present

Computer Science & Artificial Intelligence Laboratory, MIT

VISITING RESEARCHER

- Worked on linear algebra formalization of automatic differentiation with Prof. Alan Edelman (paper is in print)
- Implemented distributed non-parametric Bayesian algorithms for efficient inference with John W. Fischer (DPMM.jl)
- Implemented SoTA Visual Q & A models on GQA dataset
- As outcome, I've written DPMM.jl and KnetLayers.jl packages, and contribute to Knet.jl package

Cambridge, MA

Jul. 2018 - June 2019

Artificial Intelligence Laboratory, Koç University

RESEARCHER

- Worked on morphological analysis and disambiguation task by deploying seq2seq language models. The paper based on the research accepted by TACL, and will be presented at EMNLP 2019.
- Worked on visual-language grounding

Istanbul, Turkey

July. 2017 - July 2018

Açelik Research Center for Creative Industries, Koç University

ELECTRONICS DESIGNER & SOFTWARE ENGINEER

- Designed and programmed a prototype of interactive mug with speech recognition and artificial intelligence capabilities. A paper based on the research was submitted to TEI Conference, 2018.

Istanbul, Turkey

Sept 2016 - July 2017

Work Experience

Tria.ai

COFOUNDER; CTO

- Tria.ai is a tech consulting company which develops SoTA data science solutions for companies in retail.
- Managing technical projects and conducting product development process.

Istanbul, Turkey

November 2018 - Present

Aselsan

DIGITAL DESIGN ENGINEER INTERN

- Designed an interface on the FPGA board which drives specific IC circuits which are used in wireless communication.

Ankara, Turkey

June 2017 - July 2017

Balfis

SOFTWARE DEVELOPER INTERN

- Designed a Django web server for company's cross-platform mobile application
- Coded server-side communication part of the application, written in Ionic framework

Austin, TX

June 2016 - August 2016

Molocate

FULL-STACK DEVELOPER

- Created the UI of the IOS application
- Added back-end communication functionality to the front-end application written in the Swift language.

Istanbul, Turkey

January 2016 - August 2016

Honors & Awards

INTERNATIONAL

2016 **Regional Finalist**, Hult Prize

London

2013 **Bronze Medal**, International Physics Olympiad

Copenhagen

2013 **AP Scholar Award**, College Board

U.S

DOMESTIC

2018 **Best Senior Design Project**, Koç University Electrical Engineering Department

Istanbul

2016 **Best Design Award**, TUBITAK UAV Competition

Istanbul

2016 **2nd Place**, Istanbul Technical University Robotics Olympics

Istanbul

13'-19' **Full-Merit Undergraduate Scholarship**, Koç University

Istanbul

13'-19' **TUBITAK Undergraduate Scholarship**, TUBITAK

Ankara

2012 **Gold Medal**, TUBITAK National Physics Olympiad

Ankara

Skills

Programming Python, Julia, Java, MATLAB, C++, JavaScript, Swift, PHP, Ionic

Electronics DSP, SPICE, PCB Design, VHDL Design, Microcontrollers

Volunteer Work

Make a Wish Turkey

Istanbul, Turkey

VOLUNTEER

2014-2017

- With a group of volunteering peers, we visited cities around the country to make the utmost dreams of the children with life threatening diseases. We raised funds and arranged events for children

Koc University Education Society

Istanbul, Turkey

VOLUNTEERING TEACHER

2013-2014

- Gave free lectures for secondary school kids from families with low socio-economical status to support with their classes

Leadership & Club Activities

IEEE Robotics & Automation Society, IEEE Student Branch

Istanbul, Turkey

CHAIRMAN

July 2015 - June 2016

- Hold 5-week Arduino & Electronics Design Courses for the freshman engineering majors in the Koç University
- Arranged 5-week Raspberry Pi Development Courses given by a Microsoft MVP which provided students with internship opportunities Microsoft
- Organized Techno-Date which brings together students and tech startups. During the event students had the chance to listen-up numerous start-up journeys
- Completed two projects with the team and appointed to local awards. These projects were Drone.NET and KUAV

IEEE Student Branch

Istanbul, Turkey

BOARD MEMBER

Sept 2014 - June 2018

- Organized 12th IEEE Turkey Student & Young Professional Congress in 2015 with 400 IEEE members in Koç University
- Organized "Bi' Fikir Bi' Şirket" which is a 2-day comprehensive event for students interested in technology enterprises and startups, including seminars, workshops and entertainment. The event also comprises a competition for startups to receive support from Koc Incubation Center