Melih Yilmaz

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Research Interests

Machine learning, computational biology, proteomics, biomedical data science

EDUCATION

University of Washington

Seattle, WA

Ph.D. in Computer Science

Sep 2020-Current

Advisor: Prof. William Noble

Koc University

Istanbul, Turkey

B.S. in Electrical and Electronics Engineering

2015-2020

GPA: 4.00/4.00, Ranked 1st in the class

Osaka University

Osaka, Japan

Center for Japanese Language and Culture, MEXT Scholar

Apr 2016-Jan 2017

EXPERIENCE

University of Washington

Seattle, WA

Ph.D. Student, (Supervisors: William Noble, Sewoong Oh)

Sep 2020-Current

- Working on representation learning for tandem mass spectra and de novo peptide sequencing with deep learning.

Stanford University

Stanford, CA

Research Intern, (Supervisor: Tina Hernandez-Boussard)

Summer 2019

- Modeled post-chemotherapy patient reported outcomes and electronic health records (EHRs) for cancer patients.
- Performed trajectory clustering and risk group classification to identify vulnerable patient populations.

Koc University

Istanbul, Turkey

Undergraduate Research Assistant, (Supervisor: Murat Tekalp)

Fall 2018, Fall 2019

- Worked on learned video compression and future video frame prediction using deep learning.

Sumitomo Electric Industries

Osaka, Japan

Machine Learning Intern

Summer 2018

- Developed deep learning models to semantically segment satellite images.

PUBLICATIONS

- [1] A. Azad, M. Yilmaz, S. Bozkurt, J. Brooks, D. Blayney, and T. Hernandez-Boussard, "Diverse Patient Trajectories during Cytotoxic Chemotherapy: Capturing Longitudinal Patient Reported Outcomes", Cancer Medicine, 2021.
- [2] G. Ozsoy *, M. Yilmaz *, O. Kirmemis, and M. Tekalp, "New results in end-to-end image and video compression by deep learning", in *IEEE Signal Processing and Communications Applications Conference* (SIU), 2020.

SCHOLARSHIPS AND AWARDS

• Paul G. Allen School First-Year Ph.D. Fellowship	
• Monbukagakusho (MEXT) Scholarship in Science	
- Awarded by Japanese Ministry of Education, Cultu	ire, Sports, Science and Technology
• Turkish Government High Honour Scholarship	2015
- Awarded based on ranking (14th out of 1.8 million	students) in National University Entrance Exam
• Koc University Suna Kirac Scholarship	
- Full tuition waiver and stipend during the B.Sc. ba	ased on National University Entrance Exam rank
Skills	LANGUAGES
• Programming Languages and Tools:	• Turkish: Native
– Python, R, SQL, Julia, MATLAB, Java, C, C++	• Japanese: Advanced (JLPT N1)
• Libraries:	• French: Intermediate
- PyTorch, Keras, NumPy, Pandas, Scikit-Learn	• Spanish: Elementary