### Selahaddin HONİ

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#### **EDUCATION**

KAIST — Korea Advanced Institute of Science and Technology	Daejeon, Korea
Joint Master & PhD · School of Computing	2024
Advisor: Prof. Junehwa Song	
· I was a visiting researcher in Vision and Learning Lab supervised by Prof. Seunghoon Hong.	2023
· I completed several courses on AI and its applications as an exchange student.	2022
Istanbul Technical University	Istanbul, Turkiye
Bachelor · Electronics & Communications Engineering · GPA: 3.54 / 4.00	2022
Advisor: Prof. Bilge Günsel Thesis: Deep learning for long-term visual tracking of people	

### **EXPERIENCE**

# Graduate Student Researcher in KAIST NC Laboratory

Daejeon, Korea

NC Laboratory  $April, 2024 \sim 1 \ research \ on \ the \ design \ of \ human-centered \ computational \ systems \ in \ collaboration \ with \ AI \ to \ drive \ meaningful \ societal \ impact.$ 

# Visiting Student Researcher in KAIST Vision and Learning Laboratory

Daejeon, Korea

July, 2023 ~ December, 2023

Visual Token Matching (VTM) is a general-purpose few-shot learner for arbitrary visual dense prediction tasks, as proposed by a lab mate in an outstanding paper in ICLR'23. However, VTM cannot handle temporal information, which hinders its performance in video domains. In my internship, I enhanced VTM's generalizability by incorporating time attention into its framework. Empirical results show that the method surpasses the baseline VTM when a very limited support set is available. Specifically, the method achieves 8.89% and 4.37% higher accuracy than the baseline in 1-shot and 2-shot scenarios, respectively, on the DAVIS2016 video segmentation dataset.

### Undergraduate Researcher in Istanbul Technical University Multimedia Signal Processing and Pattern Recognition Research Group

Istanbul, Turkiye

August, 2021 ~ March, 2022

We created a novel inference architecture that leverages re-identification features for data association in visual object tracking for long-term videos. Our tracker provisionally matched the state-of-the-art performance within the scope of person tracking in the Visual Object Tracking – Long Term 2021 benchmark.

# Intern in TUBITAK BILGEM (Sci. & Tech. Research Council of Turkiye) Communication & Signal Processing Lab.

Kocaeli, Turkiye July ~ September, 2020

Our team created an end-to-end communication channel for a control model using GNU Radio. We built physical, data link, network, and transport layers and applied basic modulations on LimeSDR hardware.

Intern in HAVELSAN Inc. Ankara, Turkiye

#### Big Data & Artificial Intelligence Section

May ~ June, 2020

I led a visual gesture recognition project, created a custom dataset and a real-time app, and won an innovation award.

#### Intern in BAYKAR Technologies

Istanbul, Turkiye

Control Simulation & Embedded Software Dept.

June ~ September, 2019

My team deployed a web platform for converting embedded C code to C# code.