

# Oğul Can Yurdakul - Curriculum Vitae

- **(iii)** 0000-0002-9426-4933
- ogulyurdakul
- Ankara, Turkey
- ogulyurdakul.github.io

# Languages

Natural: Turkish (Native Speaker), English (Advanced), French (Intermediate)

Formal: MATLAB & Python (Experienced), Assembly ARM Thumb2, ANSI Common LISP, WebPPL, C

#### **Research Interests**

- Statistical Signal Processing
- Computational Neuroscience
- Cognitive Science

#### Education

10/2021 – Present | M.Sc. in Electrical and Electronics Engineering

**METU EEE** 

CGPA: 4.00 / 4.00 | Supervisor: Dr Emre Özkan | Specialization Area: Signal processing

**B.Sc.** in Mathematics (Double Major) 10/2017 - 07/2022

CGPA: 3.87 / 4.00 | Electives in metamathematics, computational topology, analysis

10/2016 - 02/2021

**B.Sc.** in Electrical and Electronics Engineering

**METU EEE** 

CGPA: 3.76 / 4.00 | Specialization in biomedical engineering, electives in signal processing

# **Publications**

2024

I. Yurdakul, O. C., Çetinkaya, M., Çelebi, E. & Özkan, E. A Rao-Blackwellized Particle Filter for Superelliptical Extended Target Tracking in 2024 27th International Conference on *Information Fusion (FUSION)* (2024), 1–8. Accepted for publication.

2020

2. Yurdakul, O. C., Subathra, M. & George, S. T. Detection of Parkinson's Disease from Gait Using Neighborhood Representation Local Binary Patterns. Biomedical Signal Processing and Control 62, 102070 (2020).

### **Work & Research Experience**

09/2019 - Present

#### Researcher

METU EEE Sensor Fusion Laboratory

Under the supervision of Dr Emre Özkan, I study statistical signal processing, emphasising information fusion and extended target tracking.

07/2019 - 09/2019

**Summer Intern in Research** 

Karunya Institute of Technology and Sciences, India

I proposed a new feature extraction method based on Local Binary Patterns, and showed that it was useful in a classification task with a shallow neural network [2].

07/2018 - 08/2018

**Summer Intern** 

IBM Turkey, Istanbul Office

I observed the process of data center migration on the field and helped the team with various tasks.

### **Teaching Experience**

02/2022 - Present

# **Teaching Assistant**

**METU EEE Staff Profile** 

Courses worked in: EE230 Probability and Random Variables EE306 Signals & Systems II EE361 Electromechanical Energy Conversion I, EE415 Intro. to Medical Imaging and EE416 Biomedical Signals, Instrumentation and Measurements.

07/2023

# **Lead Teaching Assistant**

NMA CN Summer School

In addition to the regular TA responsibilities, I was also tasked with leading seven other regular TAs. I assisted their training and provided guidance about managing their pods along with other administrative responsibilities, such as dealing with TA absences.

07/2021

## **Teaching Assistant**

NMA CN Summer School

I was the regular TA of a pod of students in NMA CN online summer school for 3 weeks. I helped them go over tutorials about fundamental topics in computational neuroscience and develop a project, and answered their questions about the coding exercises and the underlying theory.

02 - 07/2020&

#### **Part-time Student Assistant**

**METU MATH** 

10 - 12/2018

I was the student assistant for the courses MA153 Calculus for Mathematics Students I (Fall 2018) and MA154 Calculus for Mathematics Students II (Spring 2020). I graded weekly assignments and provided feedback to students.

# **Organizations & Projects**

05/2022 — Present | **Volunteer** 

Neuromatch

06/2019 — 08/2021

#### Coordinator

IAESTE LC METU

I was responsible for the acquisition and organization of work offers from around Ankara for IAESTE LC METU, trained newcomers on company relations, and hosted the incoming interns.

07/2020

#### **Interactive Student**

NMA CN Summer School

I participated in a 3-week long, intense summer school as an interactive student, which entailed preparing a project.

09/2019 - 12/2019

# **Workshop on Mathematics with High School Students**

Details

I conducted weekly workshops/lectures with Ankara Private Tevfik Fikret High School sophomore students on various topics, including countable and uncountable infinities, elementary graph theory and Eulerian paths, basic linear algebra and Fourier series representation of periodic signals.

05/2017 -- 05/2018

Team Leader & Director of Communications TEDxMETUAnkara 2017 "Grand Illusions"

I booked speakers and worked with them on their speeches and was responsible for the overall operations of the event. I also designed and managed the event website on Wix.

2015

# **Leadership School Graduate**

Young Guru Academy

I acquired soft skills such as teamwork, leadership and public speaking. I had the chance to deliver an 11-week class on leadership with two more volunteers to secondary school students.

# **Certificates & Other Skills**

# **Certificates:**

TOEFL iBT 112/120 (10/2021-10/2023), French DELF B2 76/100 (06/2015 – Present),

Various certificates on programming (More details on LinkedIn and on Acclaim)

Simulation & Design: LT Spice, Quartus II, Verilog, Fusion 360

Utilities: LATEX (Experienced), GitHub (Intermediate), Microsoft Office applications (Experienced)

# **Hobbies & Other Interests**

You can see ogulyurdakul.github.io for more details.

#### **Hobbies:**

Photography ( ogulyurdakul),

Aikido (1st Kyu),

Music (Singing, Piano)

#### Other Interests:

Philosophy of Mind,

Translation (English to Turkish),

Science Communication