GÜLÇİN BAYKAL CAN

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EDUCATION

Ph.D. Istanbul Technical University Istanbul, Turkey ♥

[=] 2020 ▶ 2024

Department of Computer Engineering, GPA: 4.00/4.00

Thesis Title: Codebook Learning: Challenges and Applications in Image Representation Learning

Advisor: Prof. Dr. Gözde Ünal

Courses: Deep Reinforcement Learning, Data Mining, Causality, 3D Vision

Guest Ph.D. University of Southern Denmark ○ Odense, Denmark ○

2024

Department of Mathematics and Computer Science

Granted by TUBITAK 2214-A - International Research Fellowship Programme for PhD Students

Project Title: Novel Probabilistic Inference Algorithms for Deep Generative Models

Advisor: Assoc. Prof. Melih Kandemir

1 2018 ▶ 2020

Department of Computer Engineering, GPA: 3.94/4.00

Thesis Title: DeshuffleGAN: Self-Supervised Learning for Generative Adversarial Networks

Advisor: Prof. Dr. Gözde Ünal

Courses: Deep Learning, Machine Learning, Artificial Intelligence, Graph Theory and Algorithms, Engineering Maths

B.Sc. Istanbul Technical University Istanbul, Turkey ♥

☼ 2014 ▶ 2018

Department of Computer Engineering, GPA: 3.59/4.00, Ranked #2 in graduation.

Thesis Title: Turkish Lira Banknotes Classification for Visually Impaired People with Deep Learning

Advisor: Prof. Dr. Gözde Ünal

Courses: Numerical Methods, Prob. & Stats., Linear Algebra, Computer Vision, Learning from Data, Artificial Intelligence

WORK EXPERIENCE

Postdoctoral Researcher · IMADA · SDU ?

= 2025 ▶ Now

Research topics: Reinforcement Learning, Visual Control

Research Assistant · ITU Vision Lab · ITU 9

= 2020 ▶ 2024

Work as a **Google DeepMind Scholar** in ITU Vision Lab. Volunteer Teaching Assistant of Deep Learning course of ITU Computer Engineering Graduate Program.

Teaching Assistant · ITU Computer Engineering Department · ITU ♥

¹ 2019 ▶ 2020

Teaching Assistant of Introduction to Information Systems, System Programming, Numerical Methods for CE, Functional Programming

Research Assistant · ITU Vision Lab · ITU 💡

□ 2018 **≥** 2019

Work as a **Turkcell Scholar** in ITU Vision Lab.

PUBLICATIONS

Available in **Google Scholar**.

SKILLS

 $\langle \rangle$ **Programming Languages:** Python \cdot C/C++ \cdot Haskell \cdot SQL \cdot HTML \cdot CSS

☐ Libraries: PyTorch · OpenCV · Matplotlib · NumPy · Pandas · Plotly · Scikit-learn · SciPy

Languages: Turkish (*Native*) · English (*Advanced*) · Japanese (*Beginner*)

HONORS AND AWARDS

Selected to attend Machine Learning Summer School 2024 in Japan.	፟ 2024
Granted by TUBITAK 2214-A International Research Fellowship Program for PhD Students.	፟ 2023
Selected to attend Mediterannean Machine Learning Summer School 2023 in Greece.	💆 2023
Granted by ITU-Google DeepMind Scholarship Program.	= 2020 ▶ Now
Granted by Turkcell-ITU Researcher Funding Program.	2 018 ≥ 2019
Graduated with Honors in 2^{nd} place from ITU Computer Engineering Department.	💆 2018
Istanbul Technical University Undergraduate Honor Scholarship.	☼ 2014 ▶ 2018
Granted by Turkish Education Foundation (TEV) High Merit Scholarship.	☼ 2014 ▶ 2018

OUTREACH AND MENTORING

Kendin İçin Kodla

= 2019 ▶ Now

Content Creator · Workshop Instructor

Kendin İçin Kodla aims to encourage high school-level female students in Turkey to pursue higher education and careers in the field of IT and CS. We focus on teaching problem solving, design, and implementation skills rather than just coding to students in our voluntary project. Through free, two-day workshops in diverse IT fields, we aim to help students explore their abilities and interests.

ITU Vision Lab

☐ 2018 ▶ Now

Supervisor

Supervised various undergraduate projects including:

 \cdot Pose guided image generation using GANs \cdot Signature detection and verification using Deep Learning \cdot Image enhancement using Deep Learning \cdot Textile pattern generation using Stable Diffusion

PROFESSIONAL ACTIVITIES

Reviewer for Asian Conference on Machine Learning (ACML)	₩ 2023 > 2024
Reviewer for Conference on Signal Processing and Communications Applications (SIU)	□ 2022 ≥ 2023

REFERENCES

Available upon request.