Anıl Kamber

Jacobs Hall, Room 4516 9736 Engineers Ln La Jolla, CA 92092 e-mail: akamber@ucsd.edu

Education

University of California, San Diego

September 2024 - Present

GPA: 3.90/4.0 (6th out of 88)

Ph.D., Electrical and Computer Engineering

Boğaziçi University

B.Sc., Electrical and Electronics Engineering

October 2020 - June 2024

İzmir Fen Lisesi

Research Experience

Graduate Research Assistant

January 2025 - Present

La Jolla, CA

Sparsity @UC San Diego

- Exploring the mysteries of deep networks.
- Supervisor: Rahul Parhi.

sparsity.ucsd.edu

Researcher

October 2024 - January 2025

Istanbul, Turkiye

KUIS AI Center

- I investigated the global identifiability of underdetermined polytopic matrix factorization.
- Supervisor: Alper T. Erdoğan.

Volumetric Analysis and Visualization Group

ai.ku.edu.tr

Undergraduate Researcher

September 2023 - June 2024

Istanbul, Turkiye

• My senior design project (bachelor's thesis) entitled *Blind Source Separation in Neuroscience* won the *Cenker Oden Senior Design Project Award*, which is the best undergraduate research award.

• Supervisor: Alper T. Erdoğan, Burak Acar.

vavlab.boun.edu.tr

Undergraduate Researcher

Boğaziçi Nanonetworking Research Group

January 2022 - January 2024

Istanbul, Turkiye

- I derived the channel response of molecular communication via diffusion in a three-dimensional half-space bounded by an infinite reflecting surface.
- As a result, my paper entitled Half-Space Modeling with Reflecting Surface in Molecular Communication was published in IEEE Transactions on Molecular, Biological and Multi-Scale Communications.
- Supervisor: Ali Emre Pusane, H. Birkan Yılmaz, Tuna Tuğcu.

$\begin{array}{l} \textbf{Algorithm Engineer Intern} \\ \textit{ASELSAN} \end{array}$

July 2023 - August 2023 Ankara, Turkiye

• I investigated integral transforms that can be employed during the preprocessing stage of machine learning models for automatic radar-signal classification.

aselsan.com/en

Other Experience

Embedded Systems Engineer FINRIX

August 2022 - September 2022 Istanbul, Turkiye

• I designed a prototype data extractor on an FPGA that captures the desired part of stock market data, which flows as a 32-bit stream aligned to a synchronous clock. (VHDL, C, C++)

finrix.io/

Publications

- [1] **Kamber, Anıl** and R. Parhi, "Hessian spectrum is constant across minimizers in regularized deep scalar factorization," in *OPT 2025: Optimization for Machine Learning (NeurIPS 2025 Workshop)*, 2025.
- [2] Kamber, Anıl, H. B. Yilmaz, A. E. Pusane, and T. Tugcu, "Half-space modeling with reflecting surface in molecular communication," *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, 2024.

Honors and Scholarships

- Electrical and Computer Engineering Department Fellowship, UC San Diego, September 2024 June 2025.
- Cenker Oden Senior Design Project Award, June 2024.
- 2205 Undergraduate Scholarship Program, TUBITAK (Scientific and Technological Research Council of Turkiye), September 2022 January 2024.
- 2247-C Intern Researcher Scholarship Program, TUBITAK, October 2022 April 2023.
- Turkish National University Entrance Exam (YKS), **446**th place among 2.6 million participants, June 2019.
- Turkish National High School Entrance Exam (TEOG), placed in the top 0.03 % among 1.6 million participants, June 2015.