EDUCATION

Northwestern University, Evanston, IL

2019-2024 (expected)

- Ph.D. in Applied Physics, GPA:3.84/4.00
- Advisor: Prof. Prem Kumar.

Koç University, Istanbul, Turkey.

2017-2019

- M.Sc., Physics. *GPA:3.76/4.00*.
- Advisor: Prof. Alper Kiraz & Coadvisor: Prof. Ataç İmamoğlu
- Thesis: Fluorescence Based Detection of Magnetic Field Effect on Photolyases and Flavin Containing Solutions

Bilkent University, Ankara, Turkey.

2012-2017

- B.Sc., Electrical and Electronics Engineering. GPA:3.50/4.00.
- Minor, Physics. *GPA:3.96/4.00*.

Work Experience

Northwestern University, Evanston, IL

2019-Present

• Graduate Research Assistant

Photonic quantum information processes in biological systems and integrated photonics on thin-film lithium niobate.

Koç University, Istanbul, Turkey

2017-2019

• Graduate Research Assistant

Quantum coherence in radical pair mechanism.

Aselsan, Ankara, Turkey

2016

• Summer Intern

Design and simulation of microstrip low pass filter at RF.

Advance Research Laboratory, Ankara, Turkey

2016

• Summer Intern

Pulse compression with Spatial Light Modulator for ultrafast fiber lasers.

TEACHING EXPERIENCE

Northwestern University

2020 - 2021

 $\bullet\,$ Teaching Assistant

GEN ENG 201 - General Engineering 1, EE 221 - Fundamentals of Circuits, EE 202 - Introduction to Electrical Engineering

Conducted problem solving sessions for a class of 20, led in lab sessions for circuit building and Matlab simulations, graded lab reports and homework assignments.

Koç University

2017-2019

• Teaching Assistant

Phys 101 - General Physics, Phys 122 - Physics for Health Sciences

Conducted problem solving sessions for a class of 60, led in lab sessions for general physics experiments, graded lab reports and quizzes.

Honors and Awards

- Northwestern University ECE Department Best Teaching Assistant Award
- Koç University Outstanding Teaching Award, Research Grant for excellence and dedication 2018 in the teaching responsibilities
- Koç University Comprehensive Scholarship, Full Tuition Waver and stipend during
 M.S program
- Bilkent University High Honor Degree

2017 2012

2021

- Turkish Education Foundation(TEV) Outstanding Success Scholarship, Monthly stipend during B.S program Awarded based on the university entrance exam
- Bilkent University Comprehensive Scholarship, Full Tuition Waver and stipend during B.S program 2012
- Nationwide University Entrance Exam(LYS), Ranked 246th among 1.8 million students 2012

OUTREACH AND MENTORING

- Northwestern Applied Physics Graduate Program Student Council 2021-Present Representing graduate student body in the program, organizing events to help students with their academic skills and improve the community
- Northwestern University Applied Physics Graduate Program Diversity, Equity and Inclusion Committee 2022-Present

Supporting fellow students with different backgrounds. Improving the mentorship program for first-year students.

• Northwestern University McCormick Graduate Teaching Committee 2022-Present Helping graduate students with their teaching experiences

 \bullet Optica Student Chapter

2019-Present

Vice President. Rebranding the chapter.
Turkish Education Foundation(TEV) Mentorink Program Mentor
Mentor. Helping two female students for their preparation for an academic life

2022-Present

TECHNICAL SKILLS

- Programming Languages: C/C++, Python, Java, VHDL.
- Technical Softwares: MATLAB, LTSpice, PSpice, MPLab X IDE, Eagle, DipTrace, Chimera, Hyper-Chem.
- Languages: Turkish (Native), English (Fluent), Spanish (Beginner)

REFEREED CONFERENCE PUBLICATIONS

1. HC Baykara*, E Bıyık*, **G Gül***, D Onural*, AS Öztürk*, İ Yıldız* (*equal contribution). "Real-Time Detection, Tracking and Classification of Multiple Moving Objects in UAV Videos", 29th IEEE International Conference on Tools with Artificial Intelligence (ICTAI), Boston, Massachusetts, USA, Nov. 2017

Presentations

- 1. **G Gül**, N Bavili, UM Dikbaş, IH Kavaklı, A İmamoğlu, A Kiraz. Fluorescence-based detection of magnetoreception. *The International OSA Network of Students Conference (IONS)*, Barcelona, Spain. 2019. (Poster)
- 2. **G Gül**, K Abdelsalam, S Fathpour, KF Lee, GS Kanter, P Kumar. Self-phase modulation in periodically-poled thin-film lithium niobate waveguides. European Physical Journal Web of Conferences 267, 02022, Hannover, Germany. 2022. (Poster)
- 3. **G Gül**, K Abdelsalam, S Fathpour, KF Lee, GS Kanter, P Kumar. Effect of periodic poling on self-phase modulation in thin-film lithium niobate waveguides. Frontier in Optics FW7E.5, Rochester, New York, USA. 2022.