



**gürtaç  
yemişcioglu**

assistant  
professor  
in  
electronics  
engineering



(+90) (533) 869 00 39



gurtac.y@gmail.com



/gurtacyemiscioglu



/gurtach



Iskele, North Cyprus

## ABOUT ME

I am an enthusiastic electronic engineer, dedicated researcher, and passionate lecturer with an excellent eye for detail and a relentless drive to explore new ideas and foster creativity. With a strong background in digital design, I have honed my skills in developing cutting-edge solutions for complex engineering challenges that seamlessly integrate functionality and aesthetics. I am driven by curiosity and the pursuit of knowledge. I have spent countless hours immersed in the world of electronics, delving deep into the latest advancements and breakthroughs. This constant exploration allows me to bring fresh perspectives to my work and contribute to the ever-evolving field. I firmly believe in inspiring the next generation of engineers and designers. I take great pride in sharing my expertise and experiences with eager minds, nurturing their passion for electronics, and encouraging them to think critically and embrace creativity. It brings me immense joy to witness the growth and success of my students as they embark on their own transformative journeys. In all aspects of my work, whether it's designing intricate circuitry or delivering engaging lectures, I strive for excellence. I embrace challenges with enthusiasm, employing my meticulous nature to ensure the highest quality of work in every endeavour.

## EXPERIENCE

### Academic

**METU NCC | lecturer |  
Kalkanlı, North CY**  
electric circuits (EEE 209),  
logic design (EEE 248 | CNG 232),  
intro. to microprocessors (EEE 347 | CNG 336),  
intro. to VLSI design (EEE 413)  
*online education coordinator of EEE,  
lab commission representative of EEE,  
minor program coordinator of digital electronics*  
[October 2018 - July 2023]

**EMU | lecturer |  
Famagusta, North CY**

digital IC design (EENG 447),  
intro. to logic design (EENG 115),  
intro. to computers (ITEC 115),  
computing for pharmacy (ITEC 107),  
computing for education (BOTE 112),  
intro. to digital media (ITEC 185)  
[October 2015 - February 2019]

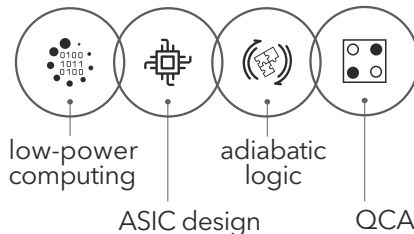
**CIU | lecturer |  
Haspolat, North CY**

programmable control logic (EELM 415),  
advances on VLSI design (ELE 544)  
[October 2018 - February 2019]

**University of Kent | lab assistant |  
Canterbury, UK**

delivered lab tutorials, supervised experiments,  
graded assignments  
[September 2009 - April 2014]

## RESEARCH INTERESTS



### Industrial

**Doğankent Constr. |  
electronic engineer |  
Famagusta, North CY**  
home automation electronics  
set up for flats, houses  
and work places.  
[April 2015 - October 2018]

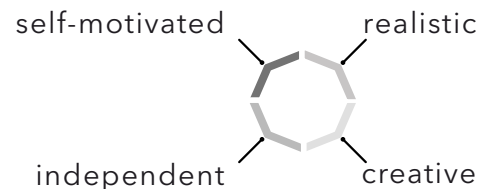
**Intel Corp. UK Ltd. |  
software engineer |  
Lincoln, UK**

worked as an intern in a software team,  
coded firmware for demodulator and  
tuners, tested software produced for  
customers, performed WHQL tests for  
windows drivers, demoed products to  
internal groups  
[July 2007 - August 2008]

## AWARDS

- School Research Award |  
University of Kent, Canterbury, UK |  
[2009]
- Outstanding Contribution Award |  
Intel Corporation, UK |  
[2008]
- Divisional Recognition Award, |  
Intel Corporation, UK |  
[2008]

## SKILLS



## EDUCATION

**PhD in Electronics  
Engineering**

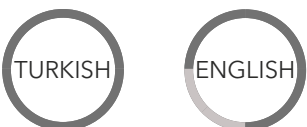
Thesis title:  
"VLSI Implementation of  
Low-Power Arithmetic  
Circuits Based on  
Adiabatic Logic and  
Logarithmic Signal  
Processing."

**University of Kent  
Canterbury, UK**  
[2009 - 2015]

**BEng (Hons)  
Computer Systems  
Engineering with a  
year in industry.**

Graduated with First  
Class Honours.  
**University of Kent  
Canterbury, UK**  
[2004 - 2009]

## LANGUAGES



## EXPERTISE

lecture preparation	analytical thinking
research methods	time management
supervision	multitasking
project management	team management
problem solving	communication

### RTL & CAD design tools

QCADesigner	● ● ● ● ●
Proteus	● ● ● ● ●
Quartus	● ● ● ● ●
Modelsim	● ● ● ● ●
Atmel Studio	● ● ● ● ●
Xilinx Tools	● ● ● ● ●
Tanner Tools	● ● ● ● ●
MATLAB	● ● ● ● ●

### Coding

VHDL	—————
Verilog	—————
System Verilog	—————
Assembly	—————
Embedded C	—————
Visual C++	—————
Latex	—————

### Operating Systems



### Other Applications



## PUBLICATIONS

A. Mamdouh, M. Mjema, G. Yemiscioglu, S. Kondo and A. Muhtaroglu, "Design of Efficient AI Accelerator Building Blocks in Quantum Dot Cellular Automata (QCA)," in *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, 2022, doi: 10.1109/JETCAS.2022.3202043.

S. Mohaghegh, S. Kondo, G. Yemiscioglu and A. Muhtaroglu, "A Novel Multiplier Hardware Organization for Finite Fields defined by All-One Polynomials," in *IEEE Transactions on Circuits and Systems II: Express Briefs*, 2022, doi: 10.1109/TCSII.2022.3188567.

S. Mohaghegh, G. Yemiscioglu and A. Muhtaroglu, "Low-Power and Area-Efficient Finite Field Multiplier Architecture Based on Irreducible All-One Polynomials," 2020 *IEEE International Symposium on Circuits and Systems (ISCAS)*, 2020, pp. 1-5, doi: 10.1109/ISCAS45731.2020.9181179.

G. Yemiscioglu, and P. Lee, "Very-Large-Scale Integration Implementation of a 16-bit Clocked Adiabatic Logic Logarithmic Signal Processor," in *IET Computers and Digital Techniques*, 2015, 9: 239-247, doi: 10.1049/IET-CDT.2014.0102.

G. Yemiscioglu and P. Lee, "16-Bit Clocked Adiabatic Logic (CAL) logarithmic signal processor," 2012 *IEEE 55th International Midwest Symposium on Circuits and Systems (MWSCAS)*, 2012, pp. 113-116, doi: 10.1109/MWSCAS.2012.6291970.

G. Yemiscioglu and P. Lee, "16-Bit Clocked Adiabatic Logic (CAL) Leading One Detector for a Logarithmic Signal Processor," *PRIME 2012; 8th Conference on Ph.D. Research in Microelectronics & Electronics*, 2012, pp. 1-4.

## PROJECTS (supervised)

- **UAV fire extinguishing hexacopter** | ESC graduation project | [October 2022 - June 2023]
- **autonomous vertical farm** | EEE graduation project | [October 2022 - June 2023]
- **autonomous oil skimmer boat** | EEE graduation project | [October 2021 - June 2022]
- **electronic face mask** | EEE graduation project | [October 2020 - June 2021]
- **autonomous beach rover** | EEE graduation project | [October 2020 - June 2021]

## VOLUNTEER

- **reviewer** | IEEE TCAS | IET Circuits, Devices & Systems | [2017 - 2019]
- **student ambassador** | EDA, University of Kent, Canterbury, UK | [2010 - 2014]
- **graduate student representative** | ICES group, School of Engineering and Digital Arts, University of Kent, Canterbury, UK | [2010 - 2014]
- **event organiser** | Turkish Cypriot society, University of Kent, Canterbury, UK | [2010 - 2013]
- **president** | Turkish Cypriot society, University of Kent, Canterbury, UK | [2009 - 2010]

## SOCIAL

