



Gülşah DEMİRHAN AYDIN, Ph.D. Instructor

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EDUCATION

| 2016-2022 Middle East Technical University, Micro and Nanotechnology, Ph. | | |
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| 2013-2016 | Middle East Technical University, Electrical and Electronics Engineering, M.S. | |
| 2007-2012 Atılım University, Mechatronics Engineering, B.S. | | |
| 2008-2012 | Anadolu University, Business Administration, B.S. | |

ACADEMIC POSITIONS

| 02/2023- Instructor (Part Time), Dept. of Mechatronics Engineering, Atılım University, Turkey | |
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| Fall 2011 – Spring Assistant for Technical Draw Course, the Department of Mechatron | |
| 2012 Engineering, the Faculty of Engineering, Atılım University | |

PROFESSIONAL EXPERIENCE

| RUFESSIONAL EXPERIENCE | | |
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| December 2020- | Senior Researcher, Electronic Packaging and Integration Division Team Leader, METU MEMS Center/Fabrication Department, Ankara | |
| May 2018- December 2020 | Researcher, Measurement and Characterization Systems Division Team Leader, METU MEMS Center/Research and Technology Development Department, Ankara | |
| 4 -11 November 2017 | Guest Researcher, Barcelona IMB-CNM, Instituto of Microelectronica, (according to METU Erasmus K103+ programme), Spain. | |
| December 2015- | Expert, Registered to Ankara Regional Expertise Board Presidency (Register:699), Ankara | |
| August 2012- May 2018 | Scientific Project Specialist, METU-MEMS Research and Application Center, METU, Ankara | |
| June – July 2011 | R & D Internship, Machinery Maintenance and Repair Division, TAI, Inc., Ankara | |
| Fall 2010 – Spring 2012 | University Promotion Representative, Breakthrough to Life Group of Atılım University | |
| Fall 2010 | Guide, LEGO Robot Machine Shop, Science Entertainment Center, Atılım University | |
| July-August 2010 | Production Internship, HBT-MTD Directorate, ASELSAN, Ankara | |

RESEARCH INTERESTS

| 1 | Micro Electro Mechanic Systems (MEMS) | |
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| 2 | Mechatronic Systems | |
| 3 | Wafer Level Packaging (WLP) | |

| 4 | 3D System Integration | |
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| 5 | 5 Microbolometers | |
| 6 | Inertial Measurement Unit (IMU) | |
| 7 | Test and Characterization of MEMS based sensors | |
| 7 Control Systems | | |

PUBLICATIONS Journals

| 1. | G. Demirhan Aydin | and T. Akin, | "Resonance-Based | Temperature |
|----|-------------------------|--------------------|------------------|-------------|
| | Sensors using a | Wafer Level | Vacuum Packaged | SOI MEMS |
| | Process," Adv. Ma | ter. Lett., 11 | (1), 20011462 | (1-8), Jan. |
| | 2020. http://dx.doi.org | /10.5185/amlett.20 | 20.011462 | |

International/National Conferences

| 1. | Gülşah Demirhan Aydın, Tayfun Akın, Resonance-Based Temperature Sensors using a Wafer Level Vacuum Packaged SOI MEMS Process, 30th Asian Advanced Materials Congress, 31 October - 4 November 2019, Singapore, pp. 65-66. |
|----|---|
| 2. | Gülşah Demirhan, Kağan Güney, Burak, Telek, S. Betül Coşkunoğlu, Zeynep Kayı, Bülent İrfanoğlu, Optical Flow, 3. Mekatronik Mühendisliği Öğrenci Kongresi (MeMÖK 2012), Atılım Üniversitesi, Ankara, pp. 15-24, 8 June 2012. ISBN 9789756707364 |

PROJECTS

| 1 | Project Title: LADES (Çip Komplesi Üretim Prosesi Geliştirilmesi ve Prototip Üretimi) Projesi (ODTÜ MEMS Merkezi-ROKETSAN Roket Sanayii ve Tic. A.Ş.) Project Duration: 08.08.2022-08.11.2023 Project Manager |
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| 2 | Project Title: OrChESTRA (Organ-on-a-Chip Focused Strategic Partnership) Call: HORIZON-WIDERA-2021 Area: WIDERA-Twinning Project nb.: 101079473 Project Duration: 01.09.2022-31.08.2025 Researcher |
| 3 | Project Title: MİKROBOLOMETRE KIZILÖTESİ DEDEKTÖR TAKIMI GELİŞTİRİLMESİ PROJESİ Supported by: T.C. Cumhurbaşkanlığı Savunma Sanayii Başkanlığı Project Duration: 12.12.2019-05.05.2022 Researcher |
| 4 | Project Title: METU MEMS Center Internal Project Development (Wafer Level Vacuum Packaging, Microbolometers, Pirani Vacuum Sensors, RF MEMS) Supported by: METU MEMS Center Project Duration: January 2017- Present Researcher |

| 5 | Project Title: TOPAZ (MEMS based Gyroscope development) Supported by: T.C. Cumhurbaşkanlığı Savunma Sanayii Başkanlığı Project Duration: August 2012-December 2016 Researcher |
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| 6 | Project Title: TURKUAZ (MEMS based Gyroscope development) Supported by: T.C. Cumhurbaşkanlığı Savunma Sanayii Başkanlığı Project Duration: August 2012-September 2015 Researcher |

CITATIONS

| Sum of times cited without self- citations (ISI Web of Science): | 4 |
|---|---|
| H-index (ISI Web of Science): | 1 |

COURSES GIVEN (in the Dept. of Mechatronics Engineering, Atılım University)

| Department of Mechatronics Engineering, Atilim University | | |
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| | 1 | MECE 522 Control Engineering II |