HİLAL BİNGÖL

Çankaya Üniversitesi, Mekatronik Mühendisliği
Eskişehir Yolu 29. Km, Office:L-325, Etimesgut / Ankara
(0312) 233 13 51
hilalbingol@cankaya.edu.tr

EDUCATION

2017 - Ongoing　　　　*Ankara University, Ankara*
　　　　　　　　　　　Ph.D., Electrical and Electronics Engineering
　　　　　　　　　　　(GPA: 3.82 / 4.00)

Thesis Title: Controller Design for Heterogeneous Platoons in the Presence of Actuator Saturation and Time-Varying Communication Delays
Supervisor: Dr. Instructor Gökhan SOYSAL
Co-advisor: Prof. Dr. Klaus Werner SCHMIDT

2014 – 2017　　　　　*Çankaya University, Ankara*
　　　　　　　　　　　M.Sc., Electronics and Communication Engineering
　　　　　　　　　　　(GPA: 3.86 / 4.00)

Thesis Title: String-Stability Analysis of Cooperative Adaptive Cruise Control Systems with Actuator Saturation
Supervisor: Prof. Dr. Klaus Werner SCHMIDT

2009 - 2014　　　　　*Çankaya University, Ankara*
　　　　　　　　　　　B.S., Electronics and Communication Engineering
　　　　　　　　　　　(GPA: 3.71 / 4.00, 2nd ranking student in ECE Department)

B.S. Project Title: FPGA Based Remote Vehicle Control

2007 – 2009　　　　　*Gazi University, Ankara*
　　　　　　　　　　　B.S., Architecture Faculty (left in 2nd year)
2004 – 2007　　　　　*Aydınlıkevler Anadolu Lisesi, Ankara*
　　　　　　　　　　　(4.88 / 5.00)

02.08.2020

MAJOR ACHIEVEMENTS & AWARDS

June 2020 – ongoing   Muharip Hava Araçlarının Ortamına Uygun Hava - Yer Angajman (Air to Ground Engagement - AGE) Analiz Modelinin Geliştirimesi (TAI – TUSAŞ Scholarship)

Sept. 2016 – June 2017   TUBITAK 1001 Scholarship

2014 – 2017   Full Scholarship during M.Sc. Studies, Çankaya University

July 2014 – Sept. 2014   TUBITAK 2241/A Scholarship for B.S. Senior Project

June 2014   2nd ranking student in Department of ECE in B.S. Graduation

Sept. 2010 – June 2014   Honor - High Honor Student in Department Of ECE, Çankaya University

Sept. 2009 – June 2014   Full Scholarship during B.S. Studies, Çankaya University

Sept. 2008 – Sept. 2009   Scholarship from the Prime Ministry of Turkey, Gazi Uni.

WORK EXPERIENCE

Sept. 1, 2014 – ongoing   Research Assistant, Mechatronics Eng., Çankaya Uni, Ankara

Sept. 2013 - June 2014   Intern / Optoelectronics & Nanoelectronics Laboratory (OPEN Lab), Çankaya University, Ankara

Aug. 2013 – Sept. 2013   Intern / Digitest Elektronik, Ankara

July 2013 – Aug. 2013   Intern / Opto-Photonic Laboratory (OFAL), Çankaya Uni, Ankara

July 2012 – Aug. 2012   Intern / Bilgi Teknolojileri ve İletişim Kurumu (BTK), Ankara

PUBLICATIONS

A) National Conference

1) **Bingöl, H.,** Schmidt, K. W., "Trajectory Generation for Vehicle Platoons with Input and State Constraints", The 28th IEEE Conference on Signal Processing and Communications Applications, 5 – 7 October, 2020. (in press)

2) **Bingöl, H.**, Kısa, G., Başayar, T., Genç, F., and Yengel, E., "Image-Based Remote Control Using FPGA", 7th Engineering and Technology Symposium, May 15-16, Cankaya University, Ankara, 2014. (text in English)

3) **Bingöl, H.**, Çankaya, E., Schmidt, K. W., "Aktüatör Satürasyonu Altında Dizi Kararlı Kooperatif Otomatik Seyir Kontrolü", 17. Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Eylül 10-12, Denizli, 2015.

B) Magazines

1) **Bingöl, H.,** Çankaya, E., Schmidt, K. W., "Eyleyici Doyumu Altında Dizi Kararlı Kooperatif Otomatik Seyir Kontrolü", Pamukkale Üniv. Müh. Bilim Dergisi, 22(8), 636-642, 2016.

02.08.2020

PROJECTS

2013-2014   B.S. Thesis - Remote Traffic Control, TÜBİTAK 2241/A Sanayi Odaklı Lisans Bitirme Tezi Destekleme Programı

FURTHER SKILLS

Programing Language   : MATLAB, VHDL, JavaScript, C, PIC Microcontroller Programming
Design Softwares   : Mentor Graphics Tools, Proteus, OrCAD PSpice, Labwiew
Technical Devices   : Atomic Force Microscopy (Nanomagnetic Inst.), Thermal Evaporator (Nanovak NVTH-350), Staubli Robot Arm, QNET Mechatronics Sensor Board

RESEARCH AREAS

Control System Theory
Intelligent Transportation Systems
FPGA (Field Programmable Gate Array)

ASSISTANSHIP

2020-2021 (Fall)
MECE 233 - Electrical Circuits Analysis + Lab
MECE 347 - Electronics + Lab.

2019-2020 (Spring)
MECE 388 - Automatic Control System + Lab
MECE 441 - Control System Design + Lab

2019-2020 (Fall)
MECE 233 - Electrical Circuits Analysis + Lab
MECE 347 - Electronics + Lab.

2018-2019 (Spring)
MECE 232 - Advanced Electrical Circuit Analysis + Lab
MECE 246 - Fundamentals of Electronics + Lab

2018-2019 (Fall)
MECE 233 - Electrical Circuits Analysis + Lab
MECE 347 - Electronics + Lab.

2017-2018 (Spring)
MECE 232 - Advanced Electrical Circuit Analysis + Lab
MECE 246 - Fundamentals of Electronics + Lab
MECE 302 - Sensors and Measurement + Lab

2017-2018 (Fall)
MECE 233 - Electrical Circuits Analysis + Lab
MECE 223 - Digital Design I + Lab
MECE 401 - Introduction to Robotics + Lab
MECE 347 - Electronics + Lab.

2016-2017 (Spring)
MECE 232 - Advanced Electrical Circuit Analysis + Lab
MECE 246 - Fundamentals of Electronics + Lab
MECE 302 - Sensors and Measurement + Lab
MECE 388 - Automatic Control System + Lab

02.08.2020

2016-2017 (Fall)
MECE 401 - Introduction to Robotics + Lab
MECE 441 - Control System Design + Lab
ECE 233 - Electrical Circuits Analysis + Lab
ECE 223 - Digital Design I + Lab

2015-2016 (Spring)
ECE 232 - Advanced Electrical Circuits Analysis + Lab
MECE 302 - Sensors and Measurement + Lab
MECE 480 - Digital Control and Applications + Lab

2015-2016 (Fall)
ECE 233 - Electrical Circuits Analysis + Lab
ECE 281 - Electrical Circuits and Instrumentation + Lab
MECE 401 - Introduction to Robotics + Lab

2014-2015 (Spring)
ECE 232 - Advanced Electrical Circuits Analysis + Lab
ECE 281 - Electrical Circuits and Instrumentation + Lab

2014-2015 (Fall)
ECE 480 - Introduction to Nanotechnology + Lab
ECE 233 - Electrical Circuits Analysis + Lab

02.08.2020