METEHAN YUKSEL | Engineering Graduate

Telephone: **+44 7488 525198** **Email:** **metehanyukselfb@gmail.com**
LinkedIn: **linkedin.com/in/metehanyuksel** **Website (Portfolio):** **metehanyuksel.com**

PROFESSIONAL PROFILE

Dynamic and highly motivated Electrical and Electronic Engineering graduate with a robust background in quality assurance, data processing, and analogue electronics. My year-long industrial placement in the semiconductor industry honed my ability to thrive in fast-paced manufacturing environments, demonstrating exceptional problem-solving skills and adaptability. With a passion for digital signal processing, I am eager to leverage my technical expertise and practical experience to drive innovation and excellence within a cutting-edge engineering team.

WORK EXPERIENCE

Industrial Placement, Diodes Zetex Semiconductors Ltd. – Oldham, UK – Sep 2021 - Sep 2022
Outline: Actively engaged in cross-functional collaboration with engineers to analyse complex data sets and optimize manufacturing process of discrete devices.

- Conducted extensive characterization tasks on both wafers and packaged discrete devices, ensuring strict adherence to required datasheets for quality assurance.
- Monitored quality assurance of a wafer batch in the fabrication building, overseeing physical stress and thickness measurements, while closely monitoring the entire fabrication process.
- Applied quantitative data analysis techniques to process and analyze test data using Excel, extracted key information, and created graphical representations to provide design engineers with insightful summaries of device performance.
- Orchestrated product test requests with meticulous attention to deadlines, priority, device type, and testing requirements utilizing Excel, ensuring seamless coordination of test timings to deliver timely and accurate results to design engineers.
- Diagnosed and calibrated probing stations and testing equipment on a regular basis, upholding the accuracy and reliability of test data.
- Actively participated in the reverse-engineering of a competitor's ultra-low capacitance device, leading the design of a diode process that reduced surface area by ~30% and capacitance by ~10%.
- Implemented improvements and information updates in documentation systems, reducing information retrieval time and eliminating misleading information.

Student Internship, EFS Elektronik – Istanbul, Turkey – Aug 2018
Outline: Maintained rigorous records of repairs and testing results, underscoring attention to detail and commitment to proper documentation.

Attendance Officer, CECOS College London – London, UK – Jan 2024 – Present
Outline: Meticulous management of student attendance records along with administrative tasks, playing a key role in maintaining the integrity and smooth operation of the college.

- Extracted key information from Academia database, cleansed and refined the data to be presented to faculty for insightful student progression with regards to areas of study.
- Compiled weekly reports in collaboration with the academic team to track the progression and performance of 600-700 students, providing vital insights to support reliable learners and address inconsistent attendees.
- Liaised with student support officers and partnering universities to strategize on managing inconsistent attendees and ensure compliance with Student Finance England requirements, maintaining the integrity of both organizations.
- Responsible for the management of attendance team and helping with coordination of the Stepney Green campus.

EDUCATION & QUALIFICATIONS

BEng Electrical and Electronic Engineering with an Industrial Year – Nottingham, UK
University of Nottingham (Sep 2019 - June 2023)
Key Modules: Analogue Electronics, Power Electronic Applications & Control, Sensing Systems & Signal Processing, Practical Engineering Design Solutions and Project Development

- Played a key role in the development of a switch-mode power supply, taking charge of gate drive design, thermal heat-sink design, control system design, PCB design and electro-magnetic component design, encompassing a transformer and an inductor.
- Designed and modelled a grid-connected single-phase full-bridge inverter, integrating control system design

to ensure grid stability and synchronization, while optimizing inverter system design for efficient energy conversion and regulation.

- Developed a sophisticated autonomous vehicle incorporating computer vision technology, encompassing integration of H-bridge, amplifier circuits, RF communication protocols, embedded C and PCB design.
- Engineered a Doppler Speed Sensor System, gaining practical experience in filter design, amplifier circuit design, and STM32 microcontroller utilization.
- Proposed an infant monitoring system with wearable technology to detect and prevent sudden infant death syndrome (SIDS), which is capable of image and sound acquisition, ambient readings, bio-readings and movement detection.

Dissertation: A Cross-Adaptive Multiband Parametric Equalization Technique to Minimize Masking in Multitrack Audio

- Pioneered a comprehensive study and research on the development of an autonomous multi-input multi-output audio manipulation technique utilizing MATLAB and digital signal processing (DSP) methods.

International Baccalaureate (Engineering with IT) + High School Diploma – Istanbul, Turkey
Uskudar American Academy (Sep 2014 - June 2019)
Key Modules: HL Physics, HL Maths, SL Computer Science, HL English

Summer High School Programme (Engineering) – London, UK
Imperial College London (Aug 2017)
Group Project: Sustainable Materials and Design

ADDITIONAL INFORMATION

Languages	English, Turkish (Native), Spanish (Beginner)
I.T. Skills	Microsoft Office (PowerPoint, Excel, Word), Programming (MATLAB, C, Python, SQL), Simulation Programs (KiCad, LTspice, PLECS)
Professional Interests	DSP, Data Analysis & Management, Database Systems, Sound Systems Analogue Electronics, Power Electronics, Semiconductors, Power Systems
Personal Interests	Music Production, Sound Engineering & Design, Hiking, Snowboarding, Scuba Diving, Culinary Arts, Motorsport, Automotive, Psychoacoustics

References are available upon request.