

Junior Engineer Profile

Dedicated to leveraging technical and operational expertise to enhance production efficiencies and maintain high standards of engineering practice.

Demonstrate proficiency in logistical coordination by maintaining inventory levels and supplying necessary materials for continuous production flow. Exhibit strong problem-solving skills through successful leadership of projects, significantly increasing operational flexibility and stability. Hold unique perspective from strategic marketing management, proven by outstanding achievements in sales and international representation, showcasing blend of technical skills and innovative thinking essential for Junior Engineer role.

Areas of Expertise

- Production Line Management
- Operational Efficiency
- Data Extraction and Analysis
- Inventory Management
- Cross-Training
- Process Optimisation
- Technical Problem-Solving
- Strategic Planning
- Project Leadership

Career Experience

Parallel Injection Machines Project Scheduler

2024

Led two-semester project at TP Electric aimed at optimising scheduling for 37 plastic injection machines using 911 molds, to minimise raw material loss and reduce total completion time. Utilised CPLEX and Python to develop and implement mathematical models and heuristic algorithms, including Genetic Algorithm, achieving significant improvements in production efficiency.

- Developed user-friendly decision support system, reducing material loss by 43% and saving company €68,400 annually, while also reducing production time by 20% (from 36 to 30 hours).
- Earned recognition as best project in Yasar University's Engineering Senior Projects competition in 2024 and secured 3rd place in TMMOB Chamber of Mechanical Engineers competition.
- Engaged in negotiations with external companies interested in adopting project and was invited to present at International Symposium on Production Research (ISPR) in Montenegro.

Hugo Boss Tekstil Sanayi Ltd. Şti., İzmir/Gaziemir Process Manager Intern

2023

Assigned roles such as beginners, flexes, liberos, and supervisors, ensuring appropriate placement based on competency to meet production demands. Coordinated supply of specific fabrics from slaughterhouse to maintain required inventory levels for various models.

- Managed production line operations for 96-hour weekly operation across two shifts, overseeing 28 operators per shift in stitching of jersey products.
- Addressed competency issues in newly active Plant 4, which had been operational for only 2 years and was experiencing high absenteeism rates; conducted detailed 14-day, 20-shift observation of all operations and personnel, categorising each operation by difficulty level (1 to 4) and determining necessary cross-training durations for operators; facilitated transfer of 2 operators from Plant 3 for 30 shifts, enabling dedicated learning time for Plant 4 operators to master lagging operations; successfully promoted 2 operators from flex to liberos roles, significantly enhancing operational flexibility and stability in plant.

Managed sales of popsockets and sustainable water bottles under Genc Basari Vakfi initiative at Izmir Ozel Turk Koleji Science High School. Negotiated partnerships with foundations, handling import and customisation of products.

- Contributed to charitable causes, donating over 15% of each sale to partnered foundations.
- Garnered Best Marketing Award from MetLife for two consecutive years, recognised for outstanding social media promotions and sales performance.
- Represented Turkey in Bruges, showcasing impact of strategic marketing and social entrepreneurship on international stage.

Freelance Projects

Mindfulness, Cognitive Functioning, and Academic Achievement Analysis

2025

Conducted an extensive data analysis using Python on a publicly available dataset from Rowan University to investigate the relationships between mindfulness, stress, and academic performance in college students. Applied exploratory data analysis (EDA), statistical modeling (linear & quadratic regression), mediation/moderation analysis, and clustering techniques (KMeans) to uncover key insights. Utilized data visualization to illustrate patterns and presented findings in a detailed report, demonstrating strong skills in data-driven decision-making, research, and statistical analysis.

Extraction and Analysis of Multi-modal Dataset for Mental Disorder Detection

2025

This study integrated multiple modalities—including EEG recordings from resting state and an emotional dot-probe task, behavioural performance measures, and a comprehensive set of clinical questionnaires—to investigate neurophysiological and cognitive markers associated with depression. Processed the EEG data to extract features such as power spectral density, event-related potentials, and time–frequency representations, while simultaneously analysing reaction times and accuracy from cognitive tasks. By combining these neurophysiological metrics with clinical assessments that capture depressive symptoms, anxiety, sleep quality, trauma history, and coping strategies, applied both supervised and unsupervised machine learning techniques to explore differences between individuals with Major Depressive Disorder and healthy controls. Advanced interpretability methods were also employed to understand feature contributions, ultimately highlighting the potential of a multi-modal, data-driven approach to enhance the objectivity and sensitivity of depression diagnosis.

Education

Industrial Engineering Degree, Yasar University, Izmir/Bornova, 2020 - 2024
Erasmus Diploma, Hochschule Heilbronn HHN, Heilbronn/Kunzelsau, 2023

Certifications

IBM Data Science Certification, Coursera, 2021
The Neuroscience of Leading High-Performance Teams, Coursera, 2024
University of California Effective Problem-Solving and Decision-Making, Coursera, 2024
SAP Professional Fundamentals Certification, Coursera 2024
Associate Data Engineer in SQL, DataCamp 2024
IELTS Certification Overall Score 7

Interests

Psychology, Sports, Travelling, Strategy Games, Socializing, AI.

Technical Proficiencies

Microsoft Office | Python | Chat Bots, Generative Pre-Defined Transformer | Arena Simulation | Managing Team
Psychology | Microsoft Excel, Visual Basic for Applications VBA | SQL

Languages

English: Professional Working Proficiency | **Turkish:** Native Proficiency | **German:** A2 Proficiency