Ahmet Geylani Tırak

Senior Industrial Designer

Brooklyn NY 11221 United States ahmet@agtirak.com

A multi-disciplinary designer with proven expertise in solving complex design challenges in diverse sectors.

An early technology adopter and a collaborative in-house entrepreneur driven by a results-oriented mindset.

Portfolio Website
LinkedIn

EXPERIENCE

Owner & Multi-disciplinary Designer | AGTIRAK Design

ANTALYA, TURKEY | NOVEMBER 2023 - PRESENT

- Providing comprehensive design solutions in product design, VR design, and human factors and ergonomics.
- Bringing diverse experience in the defense, aviation, transportation and medical sectors, ensuring adaptability to a wide range of challenges.

Senior Industrial Designer | FNSS Defense Sytems

ANKARA, TURKEY | MARCH 2023 - NOVEMBER 2023

★ UX/UI Design (Vehicle Systems)

- Architected and managed a comprehensive design system for consistent user experiences across military vehicle interfaces.
- Established a modular design system enabling rapid adaptation to diverse vehicle types.
- Optimized UI/UX workflows through the integration of digital and physical interface design principles.
- Enhanced design decision-making by providing a MIL-STD compliance-driven design system and insights from user testing and feedback.

★ VR Design and R&D Projects

- Pioneered the integration of virtual reality into the product development lifecycle for military vehicles.
- Conducted in-depth ergonomic assessments utilizing VR simulations and digital mock-ups.
- Fostered collaboration across design teams through VR training and integration initiatives.
- Created immersive VR experiences to enhance client evaluations and streamline approvals.
- Developed a Grasshopper-based tool to analyze and optimize vehicle body design and system configurations dynamically.

★ Industrial Design

- Generated pioneering concept designs for future vehicles and weapon systems, exploring innovative form factors and functionality
- Led industrial design efforts for cutting-edge concept vehicles, including unmanned and hybrid platforms.
- Effectively communicated design concepts and solutions through drawings, 3D models, and high-quality renderings.

Industrial Designer | FNSS Defense Sytems

ANKARA, TURKEY | NOVEMBER 2020 - MARCH 2023

★ Human Factors and Ergonomics

- Conducted ergonomic evaluations of tracked and wheeled military vehicles for drivers and crew members.
- Performed ergonomics simulations on vehicle 3D models using Siemens Technomatix Jack, focusing on factors such as glass and periscope field of view, console and control access, embus/debus, and emergency evacuation.
- Collaborated with design engineers to ensure the integration of ergonomic principles into vehicle design.
- Contributed to the assessment of military vehicles' compliance with military standards such as MIL-STD-1472.

★ UX/UI Design (Vehicle Systems)

- Defined user experience flows and designed user interfaces for new systems integrated into vehicles, focusing on smart screen interactions.
- Created assets aligned with the visual language for new vehicle projects and developed vehicle visuals.
- Optimized vehicle usability and functionality by designing user-friendly and functional interfaces.

Industrial Designer | Freelance

ANTALYA, TURKEY | JUNE 2019 - NOVEMBER 2020

- Delivered industrial design and consulting services to prominent clients.
- Partnered with established industrial design firms to offer collaborative design solutions.

★ Noteworthy Projects:

- Developed a portable wireless control panel for Aselsan.
- Designed an autonomous unmanned ground vehicle for Havelsan and Tekatron.
- Created a user-centric Diabetics EDC (Every-day Carry) Set for MUB Medical.

Industrial Designer | Element Product Design

ANKARA, TURKEY | AUGUST 2018 - JUNE 2019

- Undertook the industrial design process for diverse projects commissioned by leading companies.
- Guided design direction from conceptualization to CMF (Color, Material, Finish) selection, ensuring alignment with project requirements.
- Actively participated in client meetings and presentations, communicating design concepts.
- Oversaw the prototyping of designs, utilizing techniques such as metal sheet bending, CNC routing, and 3D printing.

★ Noteworthy Projects:

- Designed a Drone-catcher Unmanned Aerial Vehicle (UAV) for Altinay.
- Developed UAV-mounted Imaging Systems for Altinay.
- Created a Naval/Land Missile Launching System for Roketsan.
- Designed a Remote Missile Control System for Roketsan.
- Developed a Remote Weapon Control System for Aselsan.
- Designed a Tractor-mounted Garden Sprayer for Ontar.

EDUCATION

Bachelor of Industrial Design | TOBB University of Economics and Technology

ANKARA, TURKEY | SEPTEMBER 2013 - SEPTEMBER 2018

- GPA: 3.36/4.00
- Graduated as top 3rd of class

SKILLS

Design and 3D Modelling

Fusion 360
Rhinoceros 3D
Grasshopper
Solidworks
Catia
Blender

Visualization and User Interface

Figma Adobe XD Adobe Photoshop Adobe Illustrator

Prototyping and VR

3D Printing
Siemens Technomatix Jack
KeyVR
Unreal Engine
Gravity Sketch

AI Tools

Stable Diffusion DALLE 3 Vizcom Gemini

Soft Skills

Keyshot

Early Adopter
Problem-Solving
Self-Motivated
In-house Entrepreneur

Client Communication
Teamwork Collaboration
R&D Project Management

REFERENCES

Gokhan Keman

Industrial Design Unit Manager, FNSS

Ozgur Ulvan

Industrial Design Manager, Aselsan

Tolga Yasar Yilmaz

Human Factors Engineering Expert, ASML

ACHIEVEMENTS

Industrial Design Registration Certificates 2023

25 mm Light Turret TEBER35 Turret SABER25 Turret Kaplan Hybrid UI Design

Kaplan Hybrid Vehicle

LANGUAGES

Turkish | Native

English | Advanced

Russian | Elementary

Industrial Design Registration Certificates 2022

Medium Weight Tank 8x8 Special Purpose Vehicle 6x6 Special Purpose Vehicle