

MOHAMMAD HOSSEIN SAADATFAR

Engineer

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mhsaadatfar



ABOUT ME

Being an engineer, I love building systems that work, no matter if they are devices, software, or even a company or a group of friends. In my view, If you approach everything in a systematic way, you will be able to learn, comprehend, and improve everything faster and more effectively.

EDUCATION

MSc in Power Electronics & Electrical Machines

University of Tehran

2015 – 2018

BSc in Electrical Engineering

University of Tehran

2011 – 2015

STRENGTHS

High Frequency Power Convertors

Project/Product Management

DC/DC Convertors

Fullstack Web Design

LANGUAGES

English
Persian



REFEREES

Fattah Haeri

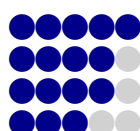
@ CEO at Mersateb Co.

f.haeri@mersateb.com

SKILLS

Programming Languages

C, C++, C#
SQL
Javascript
Verilog



EXPERIENCE

CTO, Co Founder

Mersateb Co.

April 2017 – Ongoing

Mersateb Co. was founded in 2015 and expanded with the goal of developing dermatology treatments based on radio frequency waves. It has become one of the first 3 companies producing dermatology equipment in Iran in less than 5 years. In addition, it expanded the design and production field to other types of dermatology and gynecology devices. Our company is now a manufacturer of 5 dermatology and gynecology products with over 40 employees.

- Design and Production of one medical device per year on average in the field of Dermatology and Gynecology
- Obtaining the ISO 13485 and Medical CE Certificate
- Over 1000 devices have been produced and sold. (The best-selling dermatology plasma device in Iran)
- Export to 3 European countries.
- Over 40 members of staff

CTO, Co Founder

BMD Co. (BMD ULUSLARARASI MEDİKAL ŞİRKETİ)

Sep 2019 – Ongoing

BMD Co. is the branch of Mersateb Co. in Turkey.

PROJECTS

Solatrix™ Fractional Thermo-mechanical Device

2020

Solatrix is a fractional thermo-mechanical device that has a significant effect on the rejuvenation and removal of skin lesions by transferring direct heat to the skin. The high-temperature (400°C) titanium tip of the device transfers heat to the skin with extremely low invasion; and by stimulating collagen production, it causes rejuvenation and eliminates wrinkles. The heat can be controlled by the contact time of the tip with the skin and the penetration depth of the tip.

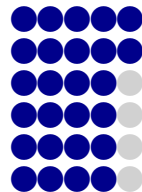
MadamX™ Vaginal RF Device

2019

The vaginal RF technology exposes the inner and outer parts of vagina to high frequency radio waves emitted from safe electrodes with remarkable results. High-energy and long-lasting RF waves is an effective treatment without any complication that can heat lower layers and muscles with monopolar and multipolar functions without heating the skin or the mucous membrane.

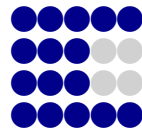
Electronics and Power Electronics

Altium Designer
LabVIEW
OrCAD
PoweSIM
MATLAB
PLC



Embedded Design

STM32 ARM, Keil MDK
FreeRTOS
Xilinx FPGA, Xilinx ISE
AVR, Codevision



Web Design

ASP.Net Web API
Vue.js, Nuxt
Astro



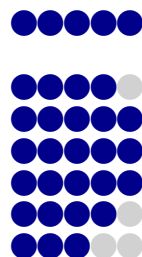
Network

CCNA
Mikrotik MTCNA



Regulation and Standards

Medical Device Directive
MDD 93/42/eec
Medical Device Regulation
MDR EU 2017/745
ISO 13485
ISO 14971
IEC 60601
ISO 9001
EMC



Project Management

Agile Method
Scrum, Kanban



Other

Git
Docker
L^AT_EX



Firebolt™ Plasma Device

 2018

The Firebolt plasma device transfers high-frequency plasma energy to the skin. This energy is used in various treatments such as blepharoplasty and the removal of moles, freckles, and wrinkles. The released energy generates a heating action on the skin surface that removes the old, damaged epidermis and dermis cells, thus triggering collagen creation. The exclusive features of the Firebolt plasma device are its high safety, various treatment indications, and its therapeutic performance without side effects.

Nettle™ Fractional RF Device

 2018

The fractional RF technology applies high-frequency and minimally-intrusive radio waves to specific skin layers to produce heat, which stimulates fibroblasts and produces collagen and elastin. Ultimately, this process significantly contributes to skin rejuvenation. Fractional RF applies radio waves to the skin with fractional needles and can produce different effects in the skin's lower layers without exposing the skin surface to heat; thus, significantly reducing treatment side effects.

Hurricane™ Carboxytherapy Device

 2019

The device starts a series of interconnected reactions after controlled and continuous injections of CO₂ and leads to some changes like vasodilation, an increase in blood flow, and an increase in body temperature. The blood flow increase leads to the oxygenation of the intended area which itself helps the metabolism increase, tissue rejuvenation, and detoxification and it finally causes rejuvenation and cellulitis decrease in the intended tissue.