



Halukcan Pehlivanoglu

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Profile :

Electrical & Electronics Engineer. Currently working with a company that specialises on smart agriculture through IoT services, located in Istanbul Technical University's Magnet business acceleration center. Has strong motivation for technical development and constantly looking for chances that could provide research opportunities. From the first years of his engineering study, has built a workshop/lab and been running freelance and self funded IoT, Sensor Networks, Robotics & Autonomous UAV projects that can potentially become a business in time.

Competences :

- Circuit Design using Altium, CircuitStudio, KiCad.
- PCB Prototyping using cnc milling and laser etching tools.
- Industrial & Mechanical Design using Solidworks, Catia, Autodesk Fusion.
- Building prototypes using FDM, SLA, SLS additive manufacturing methods.
- Designing and implementing autonomous robotic systems using sensors, microcontrollers, wireless communication systems and embedded linux.
- Designing and building Mission Flying Multicopter and Fixed Wing UAV systems.
- Designing IoT devices using GSM, NB-IoT modems, Sensors, Actuators.
- Realizing proof of concept designs and building complete prototypes.
- Designing long range narrow band communication systems.
- Building & Configuring mesh networks for IoT using WiFi, LoRa, Bluetooth.
- Arduino, NodeMCU, ESP8266 & ESP32 based IoT hardware design.
- Embedded Software Programming using C, C++, Python, Lua.
- Arm Cortex hardware design using ST Micro STM32, Nordic Semi nRF MCU's.
- Embedded Linux developing using Raspberry Pi, BeagleBone, Orange Pi etc.

Education :

Istanbul University – M.A. Management & Organization	2014—2016
Bahcesehir University – Electrical & Electronics Engineering	2009 – 2014
Florya Tevfik Ercan Anatolian High School	2005 – 2009
Terakki Foundation Private Sisli Terakki College	1996 – 2005

Language :

English →	Speaking : Advanced	Writing : Advanced
German →	Speaking : Limited	Writing : Limited
Turkish →	Speaking : Native	Writing : Native

Professional Experience

- Doktar Agricultural Technologies** (Lead SW & HW Design Engineer) 10.2018 –
- Design & Improve PCB's of IoT projects.
 - Finding efficient & accurate methods of environment sensing through technical research.
 - Design & Testing sensor probes & electronics.
 - Implementing GSM, NB-IoT, Wireless, BT communication methods for IoT projects.
 - Embedded Software programming in C, C++, Python, Lua.
 - Conducting tests on firmwares and making improvements.
 - Designing mechanical parts and housings.
 - Organizing hardware manufacturing from design.
 - Hardware design using ST Micro STM32, Nordic Semi nRF MCU's.
- Tools:** Altium, Circuit Studio, TrueStudio, Autodesk Fusion, Solidworks, Raspberry Pi, Linux, STM32, 3D Printers, Environment Sensors
- ButikTarım** (Entrepreneurial Project) (SW & HW Design Engineer) 01.2018 – 07.2018
- Created a team of four people to attend Tubitak's Young Entrepreneurship Program.
 - Designed an ESP8266 based indoor agriculture sensor.
 - Designed the embedded software.
 - Contributed to the server side web application.
- Tools:** KiCad, PHP, CentOS Linux, MySQL
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- Yupana Inc.** (Systems Engineer / R&D Consultant) 04.2016 – 09.2017
- San Francisco location**
- Assessing IT infrastructure and conducting upgrades.
 - Managing services and making purchasing decisions.
 - Running Linux based device installations.
 - Software R&D / Support.
- Istanbul location**
- Supervising multiple hardware design projects.
 - Administering local & co-located servers for projects.
 - Building and operating local network infrastructure.
- Tools:** Ubuntu Linux, CentOS, VirtualBox, VMWARE, Apache, PHP5, SQL, Python, Bash Scripting, Industry Specific GSM Network Analysis Softwares
- THY Turkish Technic** (Intern/Avionics – Flight Systems) 08.2012 – 09.2012
- THY Turkish Technic** (Intern/Avionics – Electrical Systems) 08.2011 – 09.2011
- ENKA Izmir Power Plant** (Intern/Instrument & Control) 07.2011 – 08.2011
- Acibadem International Hospital** (Intern/Instrument & Control) 04.2011 – 07.2011

Skills Set

Programming	Electronics	Graphics Design
C / C++, Lua Php, JScript Python, Java Matlab OpenCV	Circuit Design Altium / Circuit Studio Autodesk Eagle KiCad Embedded Software UAV Systems Flight Controllers Robotic Systems Radio Communication Telemetry Systems Remote Control Systems Manufacturing Raspberry Pi Arduino STM32, ESP8266 GSM Modems Nb-IoT Networks IoT Hardware Design Digital Imaging	Adobe Illustrator Adobe Photoshop Adobe Lightroom Adobe Premiere Pro Adobe After Effects
Computers		CAD
Windows Linux/Linux Server Network Topologies NAS/Backup Systems Computer Hardware Embedded Linux Cameras & Surveillance Computer Vision IoT Networks Virtualization		Technical Drawing Solidworks, Catia Autodesk Fusion 360
		Prototyping
		3D Printers Laser Cutters CNC Milling Rotary Cutters PCB Milling

Self Employed Projects

Modular Sensor Network (Founder) / Development Phase <ul style="list-style-type: none"> - Wirelessly connected mesh network. - GSM IoT Base Controller 	09.2018 –
Agricultural IoT Platform (Founder) / Development Phase <ul style="list-style-type: none"> - Multi device agricultural monitoring platform. - Currently in hardware design phase. 	09.2017 –
Modern Arcade Gaming (Founder) / Development Phase <ul style="list-style-type: none"> - An array of emulator machines in different sizes. - Lucrative business model. - Currently in Industrial Design phase. 	02.2018 –
DatcaTatilim.com (Founder) / Being Developed <ul style="list-style-type: none"> - Local Holiday Directory of Datça in Turkey that lists nearby attractions and accomodation. 	12.2017 –
PilotBul.com (Founder) <ul style="list-style-type: none"> - A directory web platform that brings uav pilots and industry together. 	01.2018 –
ihaTeknik.com (Founder) <ul style="list-style-type: none"> - Technical blog website about UAV's and Drones. 	09.2017 –