Inventor, Celil Serhan TEZCAN

Current Occupation
  Founder & Entrepreneur - TARSENS R&D
  Freelance consulting on several projects

Contact
  cstezcan@gmail.com
  +905068505798

Certifications & Qualifications
  English - C1
  Turkish - Native
  Italian - A1
  UAV License - Level 0 & 1
  Driver's License

Skills & Competencies (added on year sort)
Deep Learning
  Darknet - Object Detection, **YOLOv4-5-6-7**
  Tensorflow - Classification & Object Detection
C++ & Cuda C++ Optimization on **Nvidia Jetson**
OpenCV with **Python** backend
Robot Operating System (ROS) @ Nvidia Jetson
  Data Capture, Visualization & Management
Robot Development, UGV
  Design for Simulation & Build
  In-Field Tests & Remote Operation
Development with Embedded Systems
  Arduino, 11+ years
  Raspberry Pi, 8+ years
  Nvidia Jetson, 6+ years
IoT - Wireless Sensor Networks
  Hardware, PCB Design, production level design
  Software, Embedded programming
  Network, Frequency selection, star - mesh dev.
Linux - Bash
Github - Pull & Push
LIDAR
  Data Capture & Visualization on Jetson, Pi
Specific Band Multispectral Camera Development
QGIS
GAN - StyleGAN & Pix2Pix & Stable Diffusion

Interests & Hobbies
  Personal & Autonomous Future Mobility
  Future Physics of Fusion Reactors
  Pure Mathematics
  Brainstorming

Personal Summary
  Natural born problem solver, a curious researcher, an engineer and an inventor. I want to create the world I want to live in, healthy and in harmony.

Patent
TR 2016/17566
  Imaging device that can process, detect and interpret the images taken with its embedded system and its multi-function multispectral cameras
TR 2022/014624
  Triple camera system for obstacle avoidance for unmanned and manned aircrafts in high speeds

Work Experience
Founder of TARSENS R&D
August 2017 - Present
  Agricultural Intelligence startup with a vision of solving problems with AI at the Edge systems.
  Provided advisory to companies focused on **precision agriculture** research & development.
  Built Unmanned Ground Vehicles (**UGV**).
  Worked on **AI at the Edge** systems.
Built a tablet with **real time image processing** for precision agriculture.
  Demonstrated technologies on international events backed by **Nikkei (AGSUM'18). Rockefeller Corp. (GFIA'18).**
  Developed the most advanced **yield estimation system for vineyards with 99.778% accuracy.**
  Developed **lake surface area calculating system with accuracy of 99.6%.**
  Invited to **Embedded Vision Summit, Santa Clara'23**.
  Developed Generative Adversarial Networks for Remote Sensing
Tarsens, Been Member of;
  Nvidia Inception for AI Startups
  Microsoft BizSpark
  Samsung Enterprise Alliance Program
  AI Initiative of Turkey
  IoTxTR (IoT Startups of Turkey)
  KokProjekt (Agriculture Startups of Turkey)

LEO DRIVE - Embedded Hardware Developer
July 2016 - August 2016 (2 month)
Development Experience with
  LIDAR (Velodyne),
  GNSS Systems,

SBG IMU Systems,
  Brain Computer Interface Development (**ADS1299**)
References Armagan Arslan & Samet Kutuk

Youtube Content Creator
  Dec 2011 - Present
  @Canonest, testing of various systems
  Mar 2017 – Present
  @SelfAwareDevices, Nvidia Jetson Series Testing &
Demonstration
  Aug 2020 - Present
  @Tarsens

Hardware Designer at Uludag University Projects
June 2016 - July 2020 (3 years 2 months)
  Development of Multi Layer High Endurance
Wireless Sensor Network
  Hardware & Software Development Multispectral
Camera for Agricultural Uses
Reference; supervisor of the project Prof. Dr. Kemal
Sulhi Gündoğdu

Tayf project leader at ITU SEED incubation center
June 2016 - January 2017 (8 months)
  Developed Live-NDVI camera to be used with
UAVs

Freelance Part Time Consultant
September 2004 - January 2016 (11 years 5 months)
  Available to hire for Architects & Engineers about
future investments on Computer Builds, Render
Farms, Networks. experience for more than 10 years.
Reference: Salih Pancali, Architect, MSc.

General Manager - Foto Varol
January 2013 - August 2013 (8 months)
  Rebuilt the recognition of a small network of
photography studios as CEO/CTO in a relatively large
city, Bandirma.

Internship at Sütaş
July 2009 - August 2009 (2 months)
  Production & Farm Management

Education
  **Had several PhD attempts but realized academia is
a dead end. Some of them;**
  Mechatronics Engineering
  Geomatics Engineering (quit at dissertation)
  Biosystems Engineering

Forestry and Environmental Engineering

Master of Science MSc.
  Environmental Impact of Dairy Production, LCA
Calculation
  Bursa Uludag University, Biosystems Engineering /
Agricultural Structures, 2012 - 2015
  Activities and Societies: Project Writing, Hardware
Designer, Programmer, UAV Pilot

Agricultural Engineering,
  Animal Sciences, BSc. – Transgenic Creatures
  Bursa Uludag University, 2005 - 2011
  Activities and Societies: Photography Amateurs
Club, Physics Club

Erasmus Exchange Student Experience
  Università di Catania, BSc, Animal/Livestock
Husbandry and Production, 2009 - 2010
  Activities and Societies: AEGEE Catania, Erasmus
Students Collaboration

Honors and Awards
Bursa Uludag University, 5th Good Ideas Competition,
3rd place, 2016
Act In Space 3rd Place, 2016
Nvidia GPU Grant Program, 2016
NVIDIA GPU Grant Program 2, 2017
Tubitak (The Scientific and Technological Research
Council of Turkey), 1512 Grant 149.620 TRY
Ministry of Agriculture, Young Minds of Agriculture,
2020

Papers & Publications
Paper
  Interpreting Temperature Based Discontinuity and
Roughness of Rock Surfaces by Using
Photogrammetric Technique
DOI:10.30897/ijegeo.348806
  Determination of the Variations on Battery
Consumption According to Temperature and
Relative Humidity of Silicon Labs Si7021 Wireless
Sensor Systems in Greenhouse
DOI:10.35193/bseufbd.880520
  13 papers in the writing phase.
MSc Thesis
  A research on using possibilities of life cycle
assessment in dairy cattle farm and a case for Bursa