FATİH BAŞATEMUR

Computer Engineer

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********** Tekirdağ, Turkey

PROFESSIONAL EXPERIENCES

Çevik Çözüm

June 2020 – July 2020 İstanbul

Web application with map feature for workplaces. Angular for frontend, Java and JS for backend.

Karadeniz Technical University

July 2020 – September 2020 Trabzon

"Single-Shot Autofocus Microscopy Using Deep Learning" project was realized with Prof. Dr. Murat Ekinci. Deep learning was used to observe clearer images with a microscope.

EDUCATION

Computer Engineering

Karadeniz Technical University

2018 - Ongoing Trabzon, Turkey

GPA: 3.48/4.0

Selçuk University

2017 - 2018 Konya, Turkey

GPA: 3.83/4.0

Çorlu Mimar Sinan Anatolian High School

2012 - 2016 Tekirdağ, Turkey

AWARDS AND LEADERSHIP

2247-C TUBITAK STAR Licance Project

01-December-2020 Turkey

- I took part in the "Computer Vision and Machine Learning based automated Light Microscopy scanning and analysis for the differential diagnosis of Malignant Neoplasia and Reactive Mesothelial Hyperplasia with Computer Aided Cytopathology" project supported by TUBITAK within the scope of "2247-C Intern Researcher Scholarship Program".

2247-C TUBITAK STAR Licance Student

09-January-2020 Turkey

- I was ranked among the first 1000 of 12.000 TUBITAK scholars and was selected as a "STAR Undergraduate Student" by TUBITAK.

2021 TEKNOFEST

25-February-2021 Turkey

- In the field of Artificial Intelligence in Transportation, I participated in the contest with the "TransportAI" team.

TECHNICAL SKILLS

CUDA Runtime API (C/C++)
Keras & Tensorflow
OpenCV (C++/Python)
Darknet/YOLO V3
Computer Vision
Machine Learning / Numpy, Scikit etc.
Deep Learning / ANN
Matlab / Image Processing
Socket API
MySQL & MsSQL
PyQT5
C# Form & DevExpress
C++ CLI
Linux(PopOS) / Bash Script
Latex

PROGRAMMING

C/C++
C#
PYTHON
JAVA
DART/FLUTTER
HTML/CSS

REFERENCE

Assoc. Prof. Eren Erdal Aksoy

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Halmstad University & Computer Vision, Autonomous Vehicles, Sweden
aksoyeren.github.io

LANGUAGES

- English: B2
- Turkish: Native

PROJECTS

Image Quality Assessment with Artificial Neural Network

Artificial neural network that can measure clarity from tissue images produced using light microscope was created. The artificial neural network stages in the project are parallel with CUDA and the other stages are coded using C / C ++.

Artificial Neural Network Design using CUDA

It offers parallel testing of artificial neural network models created using Keras in C ++ environment with CUDA. Dense, BatchNormalization, ReLU, Sigmoid etc. layers are programmed with CUDA.

NSST Optimum Focused Image Generate

Non-Subsampled Shearlet Transform (NSST) is the newest image processing algorithm for the restoration of any image and proposed by Gitta Kutyniok, Wang-Q Lim, Xiaosheng Zhuang. It is used as a process step to obtain a clear image from blurry images in a data set. Project is aimed to obtain the clearest image from the images in a dataset and it was coded with C ++.

SRCNN Image Restoration

Single image super resolution example has been tried to be created with Python/Keras and PyQt5. SRCNN artificial neural network model was used for image clarification.

Multilayer & Multicategory Learning Rules ANN Design

A multi-layer and multi-neuron artificial neural network was designed. Classification of linear or nonlinear 2 dimensional samples was carried out. The project was implemented with Visual C ++ CLI.

Medical Mask Detection

Covid-19 medical mask detection for public places. Artificial neural network was created using Keras and Python.

Classificaton of Skin Cancer with CNN

7 different types of skin cancer are classified using "MNIST HAM10000" dataset. Artificial neural network was created using Python and Keras. Visualized with PyQt5.

Circle and Line Detection with Hough Transform

Hough Space algorithm is used to determine the line / circle on the image by performing the edge detection in the Canny Edge Detection process on the image.

Unsupervised Learning Classification

It is the determination of each object using the K-Means algorithm on the image and the object detection as a result of the feature extraction of each object.

ChatONE Chatapp

A messaging application was created in the PyQt5 interface with socket programming and multithreading.

Commercial Automation

Commercial automation application has been implemented. C # / DevExpress Framework and MsSQL used while creating.

EXTRA PROJECTS

- CUDA Matrix Multiplication / 2D-3D Convulation (Parallel programming with CUDA)
- Real Time Object Tracking (C++ / OpenCV | Meanshift algorithm used)
- Youtube Downloader (Python / PyQt5 and Pytube Framework)
- Eight Queens Puzzle (Solution of 8 queen problems with Heuristic Repair Method)
- Flappy Bat (JAVA / Android game and libGDX Framework)