



Abdullah Bas



Biomedical Engineer

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Work History

2020-05
Current

Co-Founder-CTO of Medical Image Processing Systems (MIPS)

Startup that focuses on healthcare solutions at home. www.mipsmedical.com

- Babylab. UTI test on urine sample.
- Menlab. Sperm fertility test.

2020-05
Current

Project Assistant-Bogazici University Ph.D

Identification of NF2 genetic mutation on meningiomas MRI data using deep learning

- I am responsible for creating DL models

2019-11
2020-12

Project Assistant- Bogazici University Ph.D

Identification of IDH-TERTp mutations on gliomas using machine learning

- I created a tool that classifies these mutations using MR Spectroscopy and Mass Spectroscopy Also, tool can be used to create new machine learning models using custom user data
- I created 1D-CNN model that classify these mutations with an accuracy of 94.12%. Sent to ISMRM 2021

2018-9
2019-9

Project Assistant- Erciyes University MSc.

Investigation of bipolar disorder using fMRI- BAP project

- I used AFNI, FSL, SPM and CONN. I wrote automation codes for SPM, CONN and AFNI. All of the codes are present in my GitHub but AFNI.

2018-1
2018-9

Project Assistant- Erciyes University MSc.

Assesment of head movements effects on resting-state fMRI

- I learned to use SPM and CONN

2014
2015

Internships

Two summer internships

- MEITAM- Calibration of medical devices -2015
- Uskudar Hospital Biomedical Department - 2014



Education

2019-09
Current

Ph.D: Artificial Intelligence

Bogazici University- Istanbul

- GPA: 3.73/4 - Current
- **Thesis: Classification of NF2 mutations on meningiomas in 1H-MRS using deep learning**
- Mastered on Python and MATLAB.
- I created machine learning GUI that capable to train new models on custom data.-MATLAB- Funded by TUBITAK 1001 project.

2017-02
2019-09

Master of Science: Neuroimaging

Erciyes University - Kayseri

- GPA: 3.63/4
- **Thesis: Analysis of fMR images in bipolar disorder-Funded by BAP Tubitak**
- I enhanced my skills on fMRI and learned AFNI, SPM, CONN and FSL
- I learned Python to work on medical image processing using deep learning

2012-09
2016-09

Bachelor of Science: Biomedical Engineering

Erciyes University - Kayseri

- GPA: 3.07/4
- Thesis: Motor control using EEG signals
- Thesis: Ultrasonic walking stick for blinds
- I developed myself on medical image processing on MATLAB and C# desktop apps.

I am very curious and open to try and learn new things. I know how to research and I am an easy learner. I enhanced my skills mainly via self-learning



Skills

Python ●●●●●

MATLAB ●●●●●

Deep Learning ●●●●●

SPM-fMRI ●●●●●

CONN ●●●●●

Linux ●●●●●

Machine Learning ●●●●●

AFNI ●●●●●

FSL ●●●●●

C# ●●●●●

Arduino ●●●●●



Language

Turkish-Native

English- Fluent



Publications

- Semra İçer, İrem Acer, Abdullah Baş, Gender-based functional connectivity differences in brain networks in childhood, Computer Methods and Programs in Biomedicine, 2020, 192,10544
- İçer, S , Baş, A . (2019). Investigation of Bipolar Disorder with Resting state functional MR . Electronic Letters on Science and Engineering . 15 (3) , 44-56 .
- İçer S, Baş A, Genç-Benli S, Özmen S, Coskun A, Assessment of head movements using AFNI and ReHo in fMRI images. 16th Turkish Neuroscience Congress 20-23 MAY 2018, ISTANBUL, TURKEY. 12 (1), 555-556
- Orhanbulucu, F , Latifoğlu, F , Baş, A . (2020). K-Ortalamlar Kümeleme Yöntemi Kullanılarak ALS Hastalarında Dikkatin Olaya İlişkin Potansiyel Sinyalleri İle İncelenmesi . Avrupa Bilim ve Teknoloji Dergisi , Ejosat Special Issue 2020 (ARACONF) , 239-244 .
- Bas A, Sacli-Bilmez B, Danyeli AE, Çakicier C, Pamir,MN, Özduman K, Dincer A, Öztürk-İsik E. 1D-CNN for the Detection of IDH and TERTp Mutations in Diffuse Gliomas using Proton Magnetic Resonance Spectroscopy. International Society for Magnetic Resonance in Medicine. Vancouver, Canada, May 15-20, 2021 - Under review
- Bas A, Sacli-Bilmez B, Danyeli AE, Çakicier C, Pamir,MN, Özduman K, Dincer A, Öztürk-İsik E. The Effect of Cramer-Rao Lower Bound Thresholds on Classification of IDH and TERTp Mutation Status in Gliomas using 1H-MRS. International Society for Magnetic Resonance in Medicine. Vancouver, Canada, May 15-20, 2021 -Under review
- Bas A, Sacli-Bilmez B, Hataş GH, Özcan A, Levi C, Danyeli AE, Can O, Çakicier C, Pamir,MN, Özduman K, Dincer A, Öztürk-İsik E. Glioma Genetic Diagnosis Software for Detection of IDH and TERTp Mutations based on 1H MR Spectroscopy and Mass Spectrometry. International Society for Magnetic Resonance in Medicine. Vancouver, Canada, May 15-20, 2021 -Under review