

دکتر اصغر زارعی

استادیار

دانشکده: مهندسی پزشکی



سوابق تحصیلی			
مقطع تحصیلی	سال اخذ مدرک	رشته و گرایش تحصیلی	دانشگاه
کارشناسی	۱۳۹۴	مهندسی پزشکی (بیوالکتریک)	صنعتی سهند تبریز
کارشناسی ارشد	۱۳۹۶	مهندسی پزشکی (بیوالکتریک)	تربیت مدرس
دکترای تخصصی	۱۴۰۱	مهندسی پزشکی (بیوالکتریک)	تربیت مدرس

### موضوعات تدریس تخصصی

شناسایی آمار الگو  
یادگیری ماشینی در زیست پزشکی  
مقدمه‌ای بر هوش محاسباتی  
مقدمه‌ای بر مهندسی پزشکی زیستی  
اصول سیستم‌های تصویرنگاری پزشکی  
آمار حیاتی و احتمال

### زمینه های تدریس

شناسایی آمار الگو  
یادگیری ماشینی در زیست پزشکی  
مقدمه‌ای بر هوش محاسباتی  
مقدمه‌ای بر مهندسی پزشکی زیستی  
اصول سیستم‌های تصویرنگاری پزشکی

## مقالات در همایش ها

1. Nazanin Sayad Mojdeh Bar , Asghar Zarei , Babak Mohammadzadeh Asl, Automatic Dream Related Emotion Classification Using EEG Nonlinear Features, 30th National and 4th International Iranian Conference on Biomedical Engineering (ICBME 2023), تهران, 2023, 12 01.
2. Romina Moghaddam , Asghar Zarei , Babak Mohammadzadeh Asl, Automatic Detection of Major Depression Disorder Using EEG Signal and Entropy-Based Features, 30th National and 4th International Iranian Conference on Biomedical Engineering (ICBME 2023), تهران, 2023, 12 01.
3. Babak Mohammadzadeh Asl, Improving the performance of P300-based BCI و Asghar Zarei systems using regularized spatiotemporal beamforming and EEG signals, 11th Basic and Clinical Neuroscience Congress, تهران, 2023, 02 13.
4. Babak Mohammadzadeh Asl, Automatic Detection of Obstructive Sleep Apnea و Asghar Zarei Using Wavelet Transform From Single-Lead ECG Signal, 24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME 2017), تهران, 2017, 11 30.
5. Rasti , & Meymandi, A., Karimzadeh, R., Zarei Asghar., & Ghaffari, A, A Non-contact heart rate estimation framework based on photoplethysmography amplitude variation elimination and data fusion , In 2021, at the 28th National and 6th International Iranian Conference on Biomedical Engineering (ICBME), تهران, 2021, 11 25.

## مقالات در نشریات

1. Zarei Asghar , Ghasemi Amir , et al., Combining pattern recognition and deep-learning-based algorithms to automatically detect commercial quadcopters using audio signals, Journal of Acoustical Engineering Society of Iran, 2022, 09 22.
2. Zarei Asghar , Ghasemi Amir , et al., Automatic classification of normal and abnormal cardiac sounds by combining features based on wavelet transform and capstral coefficients extracted from PCG signals, Journal of Acoustical Engineering Society of Iran, 2022, 09 22.
3. Asghar Zarei and Babak Mohammadzadeh Asl, Enhancing multi-class SSVEP classification performance using regularized covariance estimators, spatiotemporal beamforming, and short-time EEG trials, Measurement, 2023, 11 14.
4. Talesh Alireza , Zarei Asghar , et al, Balance-energy of resting state network in obsessive-compulsive disorder, Scientific Reports, 2023, 06 27.
5. Asghar Zarei , & Babak Mohammadzadeh Asl, Automatic detection of code-modulated visual evoked potentials using novel covariance estimators and short-time EEG signals, Computers in Biology and Medicine, 2022, 06 30.
6. Asghar Zarei , & Babak Mohammadzadeh Asl, Classification of code-modulated visual evoked potentials using adaptive modified covariance beamformer and EEG signals, Computer Methods and Programs in Biomedicine, 2022, 05 07.
7. Asghar Zarei , Hossein Beheshti , Babak Mohammadzadeh Asl, Detection of sleep apnea using deep neural networks and single-lead ECG signals, Biomedical Signal Processing and Control, 2021, 09 08.
8. Atefeh Shariat , Asghar Zarei , Sanaz Ahmadi Karvigh , Babak Mohammadzadeh Asl, Automatic detection of epileptic seizures using Riemannian geometry from scalp EEG recordings, Medical & Biological Engineering & Computing, 2021, 06 15.
9. Asghar Zarei and Babak Mohammadzadeh Asl, Automatic seizure detection using orthogonal matching pursuit, discrete wavelet transform, and entropy based features of EEG signals, Computers in Biology and Medicine, 2021, 02 04.
10. Asghar Zarei and Babak Mohammadzadeh Asl, Performance Evaluation of the Spectral

Autocorrelation Function and AR Models for Automated Sleep Apnea Detection Using Single-Lead ECG Signal,Computer Methods and Programs in Biomedicine,2020 06 26  
Asghar Zarei and Babak Mohammadzadeh Asl,Automatic classification of apnea and normal subjects using new features extracted from HRV and ECG-derived respiration signals,Biomedical Signal Processing and Control,2020 02 29  
Asghar Zarei and Babak Mohammadzadeh Asl,Automatic Detection of Obstructive Sleep Apnea Using Wavelet Transform and Entropy-Based Features From Single-Lead ECG Signal,IEEE Journal of Biomedical and Health Informatics,2018 06 01