

## ÖZGEÇMİŞ

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**2. Doğum Tarihi** : 06.01.1986

**3. Unvanı** : Doç. Dr. Eren BAŞ

**4. Öğrenim Durumu** : Doktora

Derece	Alan	Üniversite	Yıl
Lisans	İstatistik	Ondokuz Mayıs Üniversitesi	2005-2009
Yüksek Lisans	İstatistik	Ondokuz Mayıs Üniversitesi	2009-2011
Doktora	İstatistik	Ondokuz Mayıs Üniversitesi	2011-2014

### 5. Akademik Unvanlar

Unvan	Üniversite	Fakülte	Yıl
Araştırma Görevlisi	Giresun Üniversitesi	Fen- Edebiyat Fakültesi	2011-2014
Yardımcı Doçent Doktor	Giresun Üniversitesi	Fen- Edebiyat Fakültesi	2014-2017
Doçent Doktor	Giresun Üniversitesi	Fen- Edebiyat Fakültesi	2017-

### 6. Yönetilen Yüksek Lisans ve Doktora Tezleri

#### 6.1. Yüksek Lisans Tezleri

#### 6.2. Doktora Tezleri

### 7. Yayınlar

#### 7.1. Uluslararası hakemli dergilerde yayınlanan makaleler

1. Cagcag Yolcu O., Bas E., Egrioglu E., Yolcu U., Single multiplicative neuron model artificial neural network with autoregressive coefficient for time series modelling, *Neural*

*Processing Letters*, 2018. (DOI 10.1007/s11063-017-9686-3)

2. Yolcu U., Egrioglu E., **Bas E.**, Dalar A.Z. Median-Pi artificial neural network for forecasting, *Neural Computing and Applications*, 1-10 (DOI 10.1007/s00521-017-3002-z), 2018.
3. Akdeniz E., Egrioglu E., **Bas E.**, Yolcu U. An ARMA type Pi-Sigma artificial neural network for nonlinear time series forecasting, *Journal of Artificial Intelligence and Soft Computing Research*, 8(2), 121-132, 2018.
4. **Bas E.**, Egrioglu E., Uslu V.R. Shrinkage parameters for each explanatory variable found via particle swarm optimization in ridge regression, *Peertechz Journal of Computer Science and Engineering*, 2(1), 012-020, 2017.
5. **Bas E.**, Yolcu U., Egrioglu E., Cagcag Yolcu O., Dalar A.Z. Single multiplicative neuron model artificial neuron network trained by bat algorithm for time series forecasting, *American Journal Of Intelligent Systems*, 6(3), 74-77, 2016.
6. Yolcu U., **Bas E.** The forecasting of labour force participation and the unemployment rate in Poland and Turkey using fuzzy time series methods, *Comparative Economic Research*, 19(2), 5-25, 2016.
7. Egrioglu E., **Bas E.**, Aladag C.H., Yolcu U. Probabilistic fuzzy time series method based on artificial neural network, *American Journal Of Intelligent Systems*, 6(2), 42-47, 2016.
8. **Bas E.**, Uslu V.R., Egrioglu E. Robust learning algorithm for multiplicative neuron model artificial neural networks, *Expert Systems with Applications*, 56, 80-88, 2016.
9. **Bas E.** The training of multiplicative neuron model based artificial neural networks with differential evolution algorithm for forecasting, *Journal of Artificial Intelligence and Soft Computing Research*, 6(1), 5-11, 2016.
10. Yolcu U., **Bas E.**, Egrioglu E., Aladag C.H. A new multilayer feed forward network model based on trimmed mean neuron model, *Neural Network World*, 25(6), 587-602, 2015.
11. **Bas E.**, Yolcu U., Egrioglu E., Aladag C.H. A fuzzy time series forecasting method based on operation of union and feed forward artificial neural network, *American Journal of Intelligent Systems*, 5(3), 81-91, 2015.
12. **Bas E.**, Egrioglu E., Aladag C.H., Yolcu U. Fuzzy-time-series network used to forecast linear and nonlinear time series, *Applied Intelligence*, 43, 343–355, 2015.
13. Egrioglu E., Yolcu U., Aladag C.H., **Bas E.** Recurrent multiplicative neuron model artificial neural network for non-linear time series forecasting, *Neural Processing Letters*, 41, 249-258, 2015. (SCI)
14. **Bas E.**, Uslu V.R., Yolcu U., Egrioglu E. A modified genetic algorithm for fuzzy time series to find the optimal interval lengths, *Applied Intelligence*, 41(2), 453-463, 2014.

15. Aladag C.H., Yolcu U., Egrioglu E., **Bas E.** Fuzzy lagged variable selection in fuzzy time series with genetic algorithms, *Applied Soft Computing*, 22, 465-473, 2014.
16. Uslu V.R., **Bas E.**, Yolcu U., Egrioglu E. A fuzzy time series approach based on weights determined by the number of recurrences of fuzzy relations, *Swarm and Evolutionary Computation*, 15, 19–26, 2014.
17. **Bas E.**, Uslu V.R., Yolcu U., Egrioglu E. A fuzzy time series approach using de/best/1 mutation strategy of differential evolution algorithm, *Aloy Journal of Soft Computing and Applications*, 2(2), 60-69, 2014.
18. Egrioglu E., Aladag C.H., Yolcu U., **Bas E.** A new adaptive network based fuzzy inference system for time series forecasting, *Aloy Journal of Soft Computing and Applications*, 2(1), 25-32, 2014.
19. Uslu V.R., Egrioglu E., **Bas E.** Finding optimal value for the shrinkage parameter in ridge regression via particle swarm optimization, *American Journal of Intelligent Systems*, 4(4), 142-147, 2014.
20. Uslu V.R., **Bas E.**, Yolcu U., Egrioglu E. A new fuzzy time series analysis approach by using differential evolution algorithm and chronologically-determined weights, *Journal of Social and Economic Statistics*, 2(1), 18-30, 2013.
21. **Bas E.**, Uslu V.R., Yolcu U., Egrioglu E. A fuzzy time series analysis approach by using differential evolution algorithm based on the number of recurrences of fuzzy relations, *American Journal of Intelligent Systems*, 3(2), 75-82, 2013.

## 7.2. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceeding) basılan bildiriler

1. **Bas E.**, Egrioglu E., Yolcu U., A new hybrid method for the training of multiplicative neuron model artificial neural networks, *10th International Statistics Congress*, Ankara/Turkey, Book Page: 95, 06-08 December 2017.
2. Egrioglu E., Yolcu U., **Bas E.**, A new intuitionistic high order fuzzy time series method, *10th International Statistics Congress*, Ankara/Turkey, Book Page: 87, 06-08 December 2017.
3. Yolcu U., Egrioglu E., **Bas E.**, A novel Holt's method with seasonal component based on particle swarm optimization, *10th International Statistics Congress*, Ankara/Turkey, Book Page: 86, 06-08 December 2017.
4. Cagcag Yolcu O., **Bas E.**, Egrioglu E., Yolcu U., An application of single multiplicative neuron model artificial neural network with adaptive weights and biases based on autoregressive structure, *10th International Statistics Congress*, Ankara/Turkey, Book Page:

85, 06-08 December 2017.

5. Dalar A.Z., **Bas E.**, Egrioglu E., Yolcu U., Cagcag Yolcu O., Recurrent fuzzy regression functions approach based on IID innovations bootstrap with rejection sampling, *10th International Statistics Congress*, Ankara/Turkey, Book Page: 10, 06-08 December 2017.
6. Cagcag Yolcu O., Egrioglu E., **Bas E.**, Kocak C., Yolcu U., A new intuitionistic fuzzy functions approach based on IID bootstrap for time series prediction, *I. International Symposium On Economics, Finance and Econometrics*, Istanbul/Turkey, 21-23 September 2017.
7. Yolcu U., Egrioglu E., **Bas E.**, Dalar A.Z., Cagcag Yolcu O., Robust single multiplicative neuron model artificial neural network with adaptive weights and biases for forecasting, *I. International Symposium On Economics, Finance and Econometrics*, Istanbul/Turkey, 21-23 September 2017.
8. Yolcu U., Egrioglu E., **Bas E.**, Dalar A.Z., Cagcag Yolcu O., Çarpımsal nöron model yapay sinir ağları için bir çok bileşenli melez öğrenme algoritması, *EUREFE'17*, Book Page: 317, Aydın/Turkey, 27-29 July 2017.
9. Cagcag Yolcu O., Bas E., Egrioglu E., Yolcu U., Zaman serisi tahmini için tereddüt derecesine dayalı yeni bir sezgisel bulanık fonksiyon yaklaşımı, *EUREFE'17*, Book Page: 315, Aydın/Turkey, 27-29 July 2017.
10. Egrioglu E., Yolcu U., **Bas E.**, Parçacık sürü optimizasyonuna dayalı değiştirilmiş Holt yöntemi, *EUREFE'17*, Book Page: 288, Aydın/Turkey, 27-29 July 2017.
11. **Bas E.**, Egrioglu E., Yolcu U., Winters'in üstel düzleştirme yönteminde parçacık sürü optimizasyonu ile parametre tahmini, *EUREFE'17*, Book Page: 286, Aydın/Turkey, 27-29 July 2017.
12. Gundogdu O., Egrioglu E., Yolcu U., **Bas E.**, Dalar A.Z., Bootstrapped robust Pi-Sigma artificial neural network based on robust learning algorithm, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 159, Konya/Turkey, 24-26 May 2017.
13. Kocak C., Egrioglu E., Yolcu U., **Bas E.**, An application of ARMA type high order fuzzy time series forecast method based on fuzzy logic relation tables to TAIEX data, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 158, Konya/Turkey, 24-26 May 2017.
14. Yolcu U., Egrioglu E., **Bas E.**, Dalar A.Z., IID bootstrap approach with rejection sampling for Pi-Sigma artificial neural network, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Konya/Turkey, Book Page: 67, 24-26 May

2017.

15. Dalar A.Z., **Bas E.**, Yolcu U., Egrioglu E., Bagging fuzzy ridge regression functions approach for forecasting, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 66, Konya/Turkey, 24-26 May 2017.
16. **Bas E.**, Egrioglu E., Yolcu U., A robust learning algorithm for Pi-Sigma artificial neural networks based on M-Estimator, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 65, Konya/Turkey, 24-26 May 2017.
17. Cagcag Yolcu O., **Bas E.**, Yolcu U., Egrioglu E., A new intuitionistic time series fuzzy inference system, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 64, Konya/Turkey, 24-26 May 2017.
18. Egrioglu E., Yolcu U., **Bas E.**, Dalar A.Z., A Hybrid forecasting method based on exponential smoothing and multiplicative neuron model artificial neural network, *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, Book Page: 63, Konya/Turkey, 24-26 May 2017.
19. **Bas E.**, A robust learning algorithm based on modified genetic algorithm for multiplicative neuron model neural networks, *Xth International Statistics Days Conference (ISDC'2016)*, Book Page: 839-846, Giresun/ Turkey, 07-09 October 2016.
20. Uslu V.R., Kucukmustafa A.Z., **Bas E.**, Genetik algoritmaya dayalı dayanıklı regresyon yaklaşımları, *Xth International Statistics Days Conference (ISDC'2016)*, Book Page: 392-404, Giresun/ Turkey, 07-09 October 2016.
21. Kocak C., Dalar A.Z., Cagcag Yolcu O., **Bas E.**, Egrioglu, E., A new fuzzy time series algorithm based on recurrent Pi-Sigma artificial neural network, *International Conference on Trends and Perspectives in Linear Statistical Inference (LINSTAT'2016)*, Book Page: 49, Istanbul/ Turkey, 22-25 August 2016.
22. Egrioglu E., Dalar A.Z., Yolcu U., **Bas E.**, Median-Pi artificial neural network for forecasting, *International Conference on Trends and Perspectives in Linear Statistical Inference (LINSTAT'2016)*, Book Page: 37, Istanbul/ Turkey, 22-25 August 2016.
23. Dalar A.Z., Yolcu U., **Bas E.**, Egrioglu E., Bootstrap fuzzy functions for time series forecasting; Application of Borsa Istanbul, *17th International Symposium on Econometrics, Operations Research and Statistics*, Book Page: 362-363, Sivas /Turkey, 02-04 June 2016.
24. Egrioglu E., Yolcu U., Cagcag Yolcu O., **Bas E.**, A new dynamic weight neural network for BIST 100 modelling, *I. International Black Sea Business Administration Symposium*, Book Page: 602-611, Giresun/Turkey, 16-18 May 2016.
25. **Bas E.**, Egrioglu E., Cagcag Yolcu O., Yolcu U., A hybrid approach for robust training of

- single multiplicative neuron model artificial neural networks, *I. International Black Sea Business Administration Symposium*, Book Page: 471-480, Giresun/Turkey, 16-18 May 2016.
26. **Bas E.**, Egrioglu E., Yolcu U., Type 1 fuzzy function approach based on ridge regression for forecasting of time series, *12th German Probability and Statistics Days 2016 (GPSD 2016)*, Book Page: 188, Bochum/Germany, 01-04 March 2016.
27. **Bas E.**, Egrioglu E., Yolcu U., A new probabilistic fuzzy inference system for time series forecasting, *12th German Probability and Statistics Days 2016 (GPSD 2016)*, Book Page: 118, Bochum/Germany, 01-04 March 2016.
28. Egrioglu E., **Bas E.**, Aladag C.H., Yolcu U., A new probabilistic fuzzy time series method, *The 4th International Fuzzy Systems Symposium (FUZZYSS'2015)*, Book Page: 227-231, Istanbul/Turkey, 5-6 November 2015.
29. **Bas E.**, Egrioglu E., Aladag C.H., Yolcu U., A fuzzy time series network for forecasting, *International Work Conference on Time Series (ITISE 2015)*, Book Page: 541, Granada/Spain, 1-3 July 2015.
30. Yolcu U., Aladag C.H., **Bas E.**, Egrioglu E., A Hybrid multivariate fuzzy time series method based on Gustafson-Kessel fuzzy clustering technique and artificial neural network, *International Journal Of Arts & Science; Annual Multidisciplinary Conference*, Paris/France, Book Page: 193, Paris/France, 13-16 April 2015.
31. Cagcag Yolcu O., **Bas E.**, A robust algorithm for training of multiplicative neuron model artificial neural networks, *International Journal Of Arts & Science; Annual Multidisciplinary Conference*, Paris/France, Book Page: 189, Paris/France, 13-16 April 2015.
32. Yolcu U., **Bas E.**, The Forecasting of labour force participation and unemployment rate in poland and turkey with fuzzy time series methods, *Economy Today, Interdisciplinary Approach To Contemporary Economic Challenges*, Lodz/Poland, 12-13 March 2015.
33. Cagcag Yolcu O., **Bas E.**, Egrioglu E., A new artificial neural network model based on trimmed multiplicative neuron model to determine fuzzy relations, *2nd Global Conference On Computer Science, Software, Networks And Engineering*, Book Page: 10, Izmir-Kusadası/Turkey, 06-08 November 2014.
34. **Bas E.**, Yolcu U., Egrioglu E., Cagcag Yolcu O., The training of artificial neural networks with multiplicative neuron model based on differential evolution algorithm for forecasting, *2nd Global Conference on Computer Science, Software, Networks And Engineering*, Book Page: 18, Izmir-Kusadası/Turkey, 06-08 November 2014.
35. Uslu V.R., **Bas E.**, Egrioglu E., A new method to find the optimal values of the shrinkage parameters in ridge regression, *International Conference For Academic Disciplines*,

Vienna/Austria, 6-10 April 2014.

36. **Bas E.**, Uslu V.R., Yolcu U., Egrioglu E., A fuzzy time series approach based on differential evolution algorithm using De/Best/1 mutation strategy, *8. Statistical Congress*, Book Page: 172-173, Antalya/Turkey, 27-30 October 2013.
37. Uslu V.R., Egrioglu E., **Bas E.**, Finding optimal value for the shrinkage parameter in ridge regression via particle swarm optimization, *XIVth International Symposium On Econometrics - Operations Research And Statistics*, Book Page: 336, Sarajevo/Bosnia and Herzegovina, 24-28 May 2013.
38. Egrioglu E., Yolcu U., Aladag C.H., **Bas E.**, Recurrent multiplicative neuron model artificial neural network for Non-Linear time series forecasting, *2nd World Conference On Business, Economics & Management*, Antalya/Turkey, 25-28 April 2013.
39. Uslu V.R., **Bas E.**, Yolcu U., Egrioglu E., A fuzzy time series approach with differential evolution algorithm, *8th International Symposium of Statistics*, Book Page: 66-67, Eskisehir/Turkey, 11-13 November 2012.
40. Uslu V.R., **Bas E.**, Yolcu U., Egrioglu E., A new fuzzy time series analysis approach by using differential evolutionary algorithm and chronologically-determined weights, *The 6th International Conference On Applied Statistics*, Bucharest/Romania, 16-17 November 2012.
41. Uslu V.R., **Bas E.**, Yolcu U., Egrioglu E., Genetik algoritmaya dayalı yeni bir bulanık zaman serisi yaklaşımı, *International 7. Statistical Congress*, Book Page: 100-101, Antalya/ Turkey, 28 April - 1 May 2011.

### 7.3. Yazılan Uluslar arası kitaplar veya kitaplarda bölümler

1. **Bas E.**, Egrioglu E., A new fuzzy time series forecasting model with neural network structure, *Advances in Time Series Forecasting*, Vol 2, 24-36, 2017.
2. Egrioglu E., Aladag C.H., Yolcu U., **Bas E.**, Dalar A.Z., A new neural network model with deterministic trend and seasonality components for time series forecasting, *Advances in Time Series Forecasting*, Vol 2, 76-92, 2017.
3. **Bas E.**, A hybrid method for forecasting of fuzzy time series, *Advances in Time Series Forecasting*, Vol 2, 165-176, 2017.

### 1.4. Ulusal hakemli dergilerde yayımlanan makaleler

### 1.5. Ulusal bilimsel toplantılarda sunulan bildiri kitabında basılan bildiriler

1. **Baş, E.**, Uslu, V.R., Eğrioglu, E., Aladağ, C.H., Yolcu, U., Bulanık zaman serisi

çözümlemesinde bulanık ilişkilerin tekrar sayısını dikkate alan bir yaklaşım, *1. Genç İstatistikçiler Sempozyumu*, Sayfa: 27, Ankara/Türkiye, 2013 (10-11 Eylül)

## 7.6 Diğer Yayınlar

## 8.Projeler

## 9.İdari Görevler

Bölüm Başkan Yardımcısı, 2015

## 10.Bilimsel Kuruluşlara Üyelikleri

## 11.Ödüller

## 12.Son iki yılda verdiği lisans ve lisansüstü düzeyindeki dersler

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2014-2015	Güz	İstatistiğe Giriş-I	3	0	15
		Olasılığa Giriş-I	4	0	19
		Matematiksel İstatistiğe Giriş-I	4	0	33
		İstatistik Laboratuvarı-I	0	2	44
		Seminer-I	0	2	8

\* İşaretili dersler, yüksek lisans dersleridir.

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2014-2015	Bahar	İstatistiğe Giriş-II	3	0	14
		Olasılığa Giriş-II	2	2	19
		Matematiksel İstatistiğe Giriş-II	4	0	15
		Mesleki İngilizce-II	2	0	7
		Seminer-II	0	2	14

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2015-2016	Güz	Regresyon Analizine Giriş	3	0	10
		Mesleki İngilizce I	2	0	4
		İstatistiksel Sonuç Çıkarımı	3	0	13
		Çok Değişkenli İstatistiksel	2	2	14



		Sonuç Çıkarımı			
		İstatistik Teorisi*	3	0	2

\* İşaretli dersler, yüksek lisans dersleridir.

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2015-2016	Bahar	Olasılığa Giriş II	2	2	10
		İstatistiğe Giriş II	3	0	7
		Mesleki İngilizce II	2	0	2
		Parametrik Olmayan İstatistik	3	0	15
		Yöneylem Araştırması	3	0	14
		Seminer- II	0	2	3
		İstatistik Laboratuvarı- II	0	2	10
		Çok Değişkenli İstatistiksel	2	2	6
Doğrusal Modeller*	3	0	3		

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2016-2017	Güz	Regresyon Analizine Giriş	3	0	6
		Mesleki İngilizce I	2	0	1
		İstatistiksel Sonuç Çıkarımı	3	0	9
		Çok Değişkenli İstatistiksel Sonuç Çıkarımı	2	2	14
		İstatistik I (I. Öğretim)	3	0	60
		İstatistik I (II. Öğretim)	3	0	50
		İstatistik ve Olasılık I	2	2	32
		Yapay Zeka Algoritmaları*	3	0	9
		İstatistiksel Hipotez Testleri ve Teorisi*	3	0	4
		Seminer*	0	2	1

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2016-2017	Bahar	Parametrik Olmayan İstatistik	3	0	8
		Yöneylem Araştırması	3	0	5
		Seminer-II	0	2	3
		İstatistik-II (I. Öğretim)	3	0	113
		İstatistik-II (II. Öğretim)	3	0	86
		İstatistik ve Olasılık II	2	2	30

	İstatistik Teorisi*	3	0	5
	Uzmanlık Alan Dersi*	8	0	1
	Seminer*	0	2	1
	Tez Yönetimi*	0	1	1