Emre Sefer

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Education

2015   **PhD**, *Carnegie Mellon University*, Pittsburgh
Computational Biology/ School of Computer Science
Dissertation: *Inferring And Analyzing The Present And The Past Of Networks From Limited Information*
Advisor: Prof. Carl Kingsford **Committee**: Russell Schwartz, Seyoung Kim, Guy E. Blelloch

2011   **M.S.**, *University of Maryland*, College Park
Computer Science

2008   **BEng**, *Bogazici University*, Istanbul, *GPA − 3.8/4.0 (Ranked #1 in class)*
Computer Engineering

Current Interests

Machine Learning Applications in Finance, Bioinformatics, Social Networks, Machine Learning

Work Experience

Ozyegin University, Artificial Intelligence and Data Engineering Department   **Istanbul**

2024 May - **Associate Professor**
Present

Ozyegin University, Computer Science Department   **Istanbul**

2023 Aug - **UAK Associate Professor**
2024 May

2020 Sep - **Assistant Professor**
2023 Aug

IEEE Turkey   **Istanbul**

2024-Present   **Treasurer**

J.P. Morgan Chase, Corporate and Investment Banking   **New York City**

2020 Mar - **AI & Applied ML Researcher, Lead**
2020 Sep
- Develop algorithms to detect fraudulent activities in market-making & trading through time-series analysis
- Develop techniques to identify entitlement anomalies through interaction graph analysis

Goldman Sachs Asset Management, IMD   **New York City**

2018 Jan - **Vice President, Quantitative Strategist. Fundamental Equity (FE), \$60 billion mutual fund**
2019 Nov
- Generated over 1.5 Sharpe signal on supply-chain dataset for biweekly-rebalanced quantamental fund
- Developed hierarchical portfolio construction for \$5 billion Exchange Fund, by backtesting historical inflows
- Increased annual Exchange Fund inflow to \$1 billion, by developing rule-based framework to decide stock acceptance under 3 seconds
- Designed & leaded the whole IMD Exchange Fund portfolio construction project

2015 Dec - **Associate, Quantitative Strategist. Goldman Sachs Investment Partners (GSIP), flagship**
2018 Jan **multistrategy hedge fund**
- Developed systematic allocation strategies for Event driven fund by backtesting merger data
- Developed volatility trading strategies for Chinese market through index options
- Developed min-cost replication & hedging algorithms to rebalance \$1 billion Liquid Alt. funds under 2 minutes
- Responsible for risk management of \$4 billion hedge fund

CMU, School of Computer Science   **Pittsburgh**

2015 Mar - Dec	**Machine Learning Postdoctoral Researcher**,	CARNEGIE MELLON UNIVERSITY
2011-2015	**Research / Teaching Assistant**,	CARNEGIE MELLON UNIVERSITY

University of Maryland, School of Computer Science **College Park**

| 2008-2011 | **Research / Teaching Assistant**, | UNIVERSITY OF MARYLAND |

Publications

Journal Publications

- [27] Samuel Gilmour and **Emre Sefer**. Optimal Reconstruction of Biological Graph Evolution Dynamics. PLOS Complex Systems, Under Review 2024

- [26] **Emre Sefer**. Hyperbolic Deep Graph Learning for Aligning Biological Graphs at Multiple Perspectives. IEEE/ACM Transactions on Computational Biology and Bioinformatics, Under Review 2024

- [25] Selinay Cetin and **Emre Sefer**. Chromosome Conformation Capture: Significance in Comprehension of 3D Genome Architecture and Assembly. IET Systems Biology, Under Review 2024

- [24] Yasin Uygun, Ege Oztas, Nurettin Burak Altintas, Ayberk Akbalik, and **Emre Sefer**. Financial Asset Price Prediction with Graph Neural Network-based Temporal Deep Learning Models. Neural Computing and Applications, Under Review 2024

- [23] Mustafa Pala and **Emre Sefer**. NFT Sales Characteristics And Price Prediction By Transfer Learning of Visual Attributes. The Journal of Finance and Data Science, Under Review 2024

- [22] Tuna Alaygut and **Emre Sefer**. Deep Q-Network Based Cryptocurrency Investment Strategies Using Transformer Function Approximator. Expert Systems with Applications, Under Review 2024

- [21] Zehra Erva Ergun and **Emre Sefer**. FinSentiment: Predicting Financial Sentiment Through Transfer Learning. Intelligent Systems in Accounting, Finance and Management, Under Review 2024

- [20] Batuhan Eralp and **Emre Sefer**. Inferring Alternative Splicing Events and Analyzing Subtypes of Esophageal Cancer. IET Systems Biology, Under Review 2024

- [19] Batuhan Eralp and **Emre Sefer**. High order chromatin structure connect sQTLs with the splicing of distant genes. Scientific Reports, Under Review 2024

- [18] Batuhan Eralp and **Emre Sefer**. Joint Analysis of sQTL and Hi-C Reveals Spatial Proximity Between sQTLs and Target Genes in Cancer Tissues. BMC Genomics, 2024

- [17] Batuhan Eralp and **Emre Sefer**. Reference-free Inferring of Transcriptomic Events in Cancer Cells over Single-cell Data. BMC Cancer, 2024

- [16] Batur Gezici and **Emre Sefer**. Deep Transformer-based Asset Price and Direction Prediction. IEEE Access, 2024

- [15] Necla Nisa Soylu and **Emre Sefer**. DeepPTM: Protein Post-translational Modification Prediction from Protein Sequences by Combining Deep Protein Language Model with Vision Transformers. Current Bioinformatics, 2024

- [14] Necla Nisa Soylu and **Emre Sefer**. BERT2OME: Prediction of 2'-O-methylation Modifications from RNA Sequence by Transformer Architecture Based on BERT. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2023

- [13] **Emre Sefer**. MOCMIN: Convex Inferring of Modular Contact Networks over COVID Diffusion Data. Turkish Journal of Electrical Engineering and Computer Sciences, 2022

- [12] **Emre Sefer**. A Comparison of Topologically Associating Domain Callers over Mammals at High Resolution. BMC Bioinformatics, April 2022

- [11] **Emre Sefer**. Biocode: A Data-Driven Procedure to Learn the Growth of Biological Networks. IEEE/ACM Transactions on Computational Biology and Bioinformatics, April 2022

- [10] **Emre Sefer**. ProbC: Joint Modeling of Epigenome and Transcriptome Effects in 3D Genome. BMC Genomics, April 2022

- [9] **Emre Sefer**. Hi-C Interaction Graph Analysis Reveals the Impact of Histone Modifications in Chromatin Shape. Applied Network Science, July 2021

- [8] **Emre Sefer** and Carl Kingsford. Metric Labeling and Semi-metric Embedding for Protein Annotation Prediction. Journal of Computational Biology, May 2021

- [7] **Emre Sefer** and Carl Kingsford. Semi-nonparametric Modeling of Topological Domain Formation From Epigenetic Data. Algorithms for Molecular Biology 14 (1), 4. 2019

- [6] M Kleyman, **Emre Sefer**, Nicola, T., Espinoza, C., Chhabra, D., Hagood, J. S., Kaminski, N., Ambalavanan, N., and Ziv Bar-Joseph. Selecting the most appropriate time points to profile in high-throughput studies. eLife Sciences 2017

- [5] **Emre Sefer**, M Kleyman, and Ziv Bar-Joseph. Tradeoffs between Dense and Replicate Sampling Strategies for High-Throughput Time Series Experiments. Cell systems 3 (1), 35-42. 2016

- [4] **Emre Sefer**, Geet Duggal, and Carl Kingsford. Deconvolution Of Ensemble Chromatin Interaction Data Reveals The Latent Mixing Structures In Cell Subpopulations. Journal of Computational Biology 23 (6), 425-438. 2016

- [3] **Emre Sefer** and Carl Kingsford. Diffusion Archaeology for Diffusion Progression History Reconstruction. Knowledge and Information Systems 2016(2):530-539

- [2] Geet Duggal, Rob Patro, **Sefer, Emre**, Hao Wang, Darya Filippova, Samir Khuller, and Carl Kingsford. Resolving spatial inconsistencies in chromosome conformation measurements. Algorithms for Molecular Biology, 8(1):8, 2013

- [1] Rob Patro, **Emre Sefer**, Justin Malin, Guillaume Marcais, Saket Navlakha, Carl Kingsford. Parsimonious reconstruction of network evolution. Algorithms for Molecular Biology 2012 7:25

Conference Publications with Proceedings (Refereed)

- [17] **Emre Sefer** and Samuel Gilmour. Optimal Reconstruction of Graph Evolution Dynamics for Duplication-based Models. Complex Networks 2023

- [16] Betul Seyhan and **Emre Sefer**. NFT Primary Sale Price and Secondary Sale Prediction via Deep Learning. ICAIF 2023, 4th ACM International Conference on AI in Finance

- [15] Tuna Tuncer, Uygar Kaya, **Emre Sefer**, Onur Uralcam, Tugcan Hoser. Asset Price and Direction Prediction via Deep 2D Transformer and Convolutional Neural Networks. ICAIF 2022, 3rd ACM International Conference on AI in Finance

- [14] Ugur Dolu and **Emre Sefer**. A Novel GBT-based Approach for Cross-Channel Fraud Detection on Real-World Banking Transactions. AIAI 2022, 18th International Conference on Artificial Intelligence Applications and Innovations

- [13] **Emre Sefer**. Joint Modeling of Histone Modifications in 3D Genome Shape Through Hi-C Interaction Graph. Complex Networks 2020

- [12] **Emre Sefer**, and Ziv Bar-Joseph. Shall we dense? Comparing design strategies for time series expression experiments*. RECOMB 2016, ***Winner of the Best Paper Award**

- [11] **Emre Sefer**, Geet Duggal, and Carl Kingsford. Deconvolution Of Ensemble Chromatin Interaction Data Reveals The Latent Mixing Structures In Cell Subpopulations. RECOMB 2015

- [10] **Emre Sefer** and Carl Kingsford. Convex Risk Minimization To Infer Networks From Probabilistic Diffusion Data At Multiple Scales. ICDE 2015

- [9] **Emre Sefer** and Carl Kingsford. Semi-nonparametric Modeling of Topological Domain Formation From Epigenetic Data. WABI 2015

- [8] **Emre Sefer** and Carl Kingsford. Diffusion Archaeology for Diffusion Progression History Reconstruction. ICDM 2014

- [7] Geet Duggal, Rob Patro, **Sefer, Emre**, Hao Wang, Darya Filippova, Samir Khuller, and Carl Kingsford. Resolving spatial inconsistencies in chromosome conformation measurements. WABI 2012

o [6] Robert Patro, Geet Duggal, **Emre Sefer**, Hao Wang, Darya Filippova, and Carl Kingsford. The missing models: a data-driven approach for learning how networks grow*. KDD 2012, ***Winner of Best Video Award**

o [5] Rob Patro, **Emre Sefer**, Justin Malin, Guillaume Marcais, Saket Navlakha, Carl Kingsford. Parsimonious reconstruction of network evolution. WABI 2011

o [4] Robert Gove, Nick Gramsky, **Emre Sefer**, Ben Shneiderman. NetVisia: Heat map & matrix visualization of dynamic social network statistics & content. SocialCom 2011

o [3] **Emre Sefer** and Carl Kingsford. Metric labeling and semi-metric embedding for protein annotation prediction. RECOMB 2011

o [2] Dana Nau, **Emre Sefer**, Ugur Kuter. Thinking ahead in real-time search. ICAPS 2009

o [1] **Emre Sefer**, Ugur Kuter, Dana Nau. Real-time A* search with depth-k lookahead. International Symposium on Combinatorial Search, SoCS 2009

Journal & Conference Abstracts with Proceedings

o [1] Teodora Nicola, **Emre Sefer**, et al. Identification Of Optimal Time Points And Proteomic Profiling During Murine Lung Alveolar Septation [abstract]. American Journal of Respiratory and Critical Care Medicine 2016;193:A6561

o [2] C. R. Espinoza, D. Chhabra, T. Nicola, N. Ambalavanan, N. Kaminski , **Emre Sefer** , Z. Bar-Joseph, J. S. Hagood. Dynamic Changes of DNA Methylation During Different Stages of Normal Mouse Lung Development [abstract]. American Journal of Respiratory and Critical Care Medicine 2016;193:A2344

Supervised Thesis

o Ugur Dolu, 2022, Novel Sampling Technique and Gradient Boosting Tree-based Approach for Cross-channel fraud detection. M.S., Ozyegin University Data Science Department

o Zehra Erva Ergun, 2022, Word Embeddings on Financial Text Datasets. M.S., Ozyegin University Computer Science Department

o Batuhan Eralp, 2023, Utilizing Hi-C Data To Reveal The Proximity of SQTLs and Target Genes in 3D Genome of Cancer Cells. M.S., Ozyegin University Computer Science Department

o Necla Nisa Soylu, 2023, Prediction of RNA and Protein Modifications by Deep Learning Methods. M.S, Ozyegin University Artificial Intelligence Department

o Mustafa Pala, 2023, NFT Sales Characteristics And Price Prediction By Transfer Learning of Visual Attributes. M.S., Ozyegin University Computer Science Department

o Batur Gezici, 2023, Deep Transformer-based Asset Price and Direction Prediction. M.S., Ozyegin University Artificial Intelligence Department

o Tuna Alaygut, 2024, Deep Q-Network Based Cryptocurrency Investment Strategies Using Transformer Function Approximator. M.S., Ozyegin University Computer Science Department

o Yasin Uygun, 2024, Financial Asset Price Prediction with Graph Neural Network-based Temporal Deep Learning Models. M.S., Ozyegin University Computer Science Department

Thesis In Progress

o Gorkem Yencak, 2021-present. PhD, Ozyegin University Computer Science Department

o Yasin Uygun, 2024-present. PhD, Ozyegin University Computer Science Department

o Necla Nisa Soylu 2024-present. PhD, Ozyegin University Computer Science Department

o Muratcan Kilicci, 2022-present. M.S., Ozyegin University Computer Science Department

o Berkay Celik, 2022-present. M.S., Ozyegin University Computer Science Department

o Baris Arat, 2023-present. M.S., Ozyegin University Computer Science Department

o Ahmet Cagatay Savasli, 2023-present. M.S., Ozyegin University Computer Science Department

- Yigit Demirsan, 2023-present. M.S., Ozyegin University Computer Science Department
- Betul Seyhan, 2023-present. M.S., Ozyegin University Computer Science Department
- Welaa Sekheta, 2024-present. M.S., Ozyegin University Computer Science Department
- Merve Zeynep Ozturk, 2024-present. M.S., Ozyegin University Computer Science Department

Undergraduate Student Researchers

- Zeynep Zulal Bekerecioglu, 2023-present, Predicting Lysine glycation sites. B.S., Bogazici University Mathematics Department
- Bugra Baltaci and Metin Arkanoz, 2023-present, Company Return Prediction by Analyzing Supply Chain Graphs. B.S., Ozyegin University Industrial Engineering and Computer Science Departments
- Selinay Cetin, 2022-present, TAD Prediction from RNA-associated Interactions. B,S., Ozyegin University Electrical and Electronics Engineering Department
- Azra Oymaagac, 2023-present, Bioinformatics. B.S., Ozyegin University Computer Engineering Department
- Kerem Bekmez and Utku Ayten, 2023-present, NFT Dynamics. B,S., Ozyegin University Electrical and Electronics Engineering Department

Honors and Awards

- Received **Best Paper Award** at RECOMB 2016
- 2020 Marie Sklodowska-Curie Actions Seal of Excellence winner (MSCA proposal 101031511 – DeepGenome)
- TUBITAK, H2020 Programs, "Over the threshold" award in 2020 for scoring 86.4/100 in H2020-MSCA-IF-2020 proposal with "DeepGenome" project
- Received University of Maryland Computer Science Fellowship during graduate studies
- Graduated from Bogazici University in the **1st** rank with High Honors
- Received Bogazici University Full Scholarship during undergraduate studies
- Received **Best Video Award** at KDD 2012 conference
- Received fellowships for RECOMB 2011, RECOMB 2015, ICDM 2014, ICDE 2015, ICAPS 2009 conferences
- Ranked in 0.01% in 1.500.000 people in Turkey University Entrance Exam (OSS)
- Ranked 17th among 100.000 people in Turkey Graduate Education Test (ALES) 2008

Research Grants

- Scientific and Technological Research Council of Turkey (Tubitak) 3501: DeepGenome: Inferring and Analyzing Genome Shape and Its Dynamics Across Species and Cell Types by Deep Learning
- Scientific and Technological Research Council of Turkey (Tubitak) 1002: RNA Modification Prediction by Combining Deep Learning with Natural Language Processing Techniques across Species

Invited Talks & Tutorials

Peer-reviewed Conference Presentations

- Asset Price and Direction Prediction via Deep 2D Transformer and Convolutional Neural Networks. ICAIF 2022, New York City, USA. 2/11/2022
- MOCMIN: Convex Inferring of Modular Low-Rank Contact Networks over COVID Diffusion Data. BIOKDD workshop in KDD 2022, Washington DC, USA. 15/08/2022

- Biocode: A Data-Driven Approach for Learning How Biological Networks Grow. BIOKDD workshop in KDD 2021, Singapore. 15/08/2021

- MOCMIN: Convex Inferring of Modular Contact Networks over COVID Diffusion Data. Communities in Networks Satellite in Networks 2021, Indiana, USA. 01/07/2021

- Joint Modeling of Histone Modifications in 3D Genome Shape Through Hi-C Interaction Graph. Complex Networks 2020, Madrid, Spain. 02/12/2020

- Shall we dense? Comparing design strategies for time series expression experiments. RECOMB 2016, Los Angeles, USA. 10/04/2016

- Semi-nonparametric Modeling of Topological Domain Formation From Epigenetic Data. WABI 2015, Atlanta, USA. 15/09/2015

- Deconvolution Of Ensemble Chromatin Interaction Data Reveals The Latent Mixing Structures In Cell Subpopulations. RECOMB 2015, Warsaw, Poland. 18/04/2015

- Convex Risk Minimization To Infer Networks From Probabilistic Diffusion Data At Multiple Scales. ICDE 2015, Seoul, South Korea. 12/04/2015

- Diffusion Archaeology for Diffusion Progression History Reconstruction. ICDM 2014, Shenzen, China. 18/12/2014

- Metric labeling and semi-metric embedding for protein annotation prediction. RECOMB 2011, Vancouver, Canada. 10/04/2011

- Real-time A* search with depth-k lookahead. International Symposium on Combinatorial Search. SoCS 2009, Los Angeles, USA. 14/08/2009

Tutorials

- Finding Topological Domains in Genome. ACM-BCB 2015, Atlanta, USA. 12/09/2015

Special Invited Talks

- Derin Öğrenme Vasıtasıyla RNA ve Protein Değişimlerinin Tahmini. Association for Systems Biology and Bioinformatics, Istanbul, Turkey. 02/12/2023

- Temporal Deep Learning and Graph Neural Networks for Asset Price Prediction. Ozyegin University School of Management Seminar, Istanbul, Turkey. 10/11/2023

- ChatGPT: Advantages and Limitations. Basic Oncology Association (TEOD) Seminar, Istanbul, Turkey. 31/05/2023

- Analyzing The Present And The Past Of The Networks From Limited Information. Ozyegin University Computer Science Department, Istanbul, Turkey. 14/04/2020

- Analyzing The Present And The Past Of The Networks From Limited Information. Istanbul Technical University, Faculty of Computer Engineering, Istanbul, Turkey. 04/04/2020

- Analyzing The Present And The Past Of The Networks From Limited Information. Yeditepe University, Computer Engineering Department, Istanbul, Turkey. 27/03/2020

- Analyzing The Present And The Past Of The Networks From Limited Information. Kadir Has University Computer Science Department, Istanbul, Turkey. 20/03/2020

- Deconvolution Of Ensemble Chromatin Interaction Data Reveals The Latent Mixing Structures In Cell Subpopulations. Ziv-Bar Joseph's Systems Biology Research Group at CMU Machine Learning Department, Pittsburgh, PA. 14/02/2015

Posters

- Convex Risk Minimization To Infer Networks From Probabilistic Diffusion Data At Multiple Scales. GLBIO 2015, Pittsburgh, USA. 12/04/2015

- Real-time A* search with depth-k lookahead. International Symposium on Combinatorial Search. SoCS 2009, Los Angeles, USA. 14/08/2009

Professional Contributions

- Serving as **editor** for BMC Bioinformatics journal
- Serving as **editor** for Frontiers in Artificial Intelligence and Frontiers in Big Data journals
- Serving as **editor** for Journal of Advances in Management Sciences & Information Systems journal
- Gave **tutorial** about topological domains in 3D genome at ACM-BCB 2015
- Served as a **Program Committee Member** and reviewed papers for ICAIF 2024, SDM 2024, ISMB MLCSB COSI 2024, ACML 2024, ECAI 2024, IIAI AAI 2024, KDD 2024, WWW 2024, NLDL 2024, ISMB MLCSB COSI 2023, ACML 2023, KDD 2023, ASYU 2023, IJCAI 2021 & 2022, Complex Networks 2021 & 2022, ACM-BCB 2015, ASYU 2022
- Organized Artificial Intelligence Summer School at Ozyegin University, with almost 1000 participants
- Worked as a part of NIH funded **LungMAP** project to map lung dynamics (https://www.lungmap.net/)
- Contributed to the writing of NIH grant proposal 1R21AI085376 to investigate biological network dynamics
- Academic Coordinator for Erasmus and International Exchange Programs, Computer Science Department, Ozyegin University, since Spring 2021
- Reviewed papers for Computational and Structural Biotechnology, Plos Computational Biology, Nature Scientific Reports, International Review of Financial Analysis, Bioinformatics Advances, Frontiers in Big Data, Frontiers in Artificial Intelligence, Frontiers in Pyschology, Frontiers in Cell and Developmental Biology, Genome Research, Bioinformatics, BMC Bioinformatics, Journal of Computational Biology, Nucleic Acids Research, IEEE Transactions on Computational Biology and Bioinformatics, Optimization Letters, Journal of Global Optimization, Briefings in Bioinformatics, General Physiology and Biophysics, Heliyon, Financial Innovation, Turkish Journal Of Electrical Engineering & Computer Sciences journals

Teaching Experience

Assistant Professor,   OZYEGIN UNIVERSITY
- CS 104: Introduction to Programming
- CS 201: Data Structures and Algorithms
- CS 333: Algorithms Analysis
- CS 412/512: Bioinformatics Algorithms
- CS 440/540: Machine Learning in Finance
- CS 452/552: Data Science with Python
- CS 533: Advanced Algorithms

Undergraduate Senior Project Supervision

- Prediction of SARS-CoV-2 Variants From Protein Sequence by Federated Transformer Architecture Based on BERT. Jana Ayoub, 2023
- Bitcoin Price Prediction Regarding Transaction Graphs. Atahan Caldir, Ezgi Maden, Emre Kenar, 2023
- NFT Primary Sale Price and Secondary Sale Prediction. Ege Gungordu, Betul Seyhan, Irem Karabacakogullarindan, 2023
- Bullseye: Stock Market Index Calculator. Gufran Yesilyurt, Murat Can Altun, Kaan Yilmaz, 2023
- Cryptocurrency Price Prediction via On-Chain Analysis. Ceren Yıldızdogan, Furkan Kerem Selimoglu, Yigit Demirsan, 2023
- MergerBERT: Predicting Merger Targets and Acquirers from Text via Pretrained Language Models. Alanur Bilgili, Ahmet Cagatay Savaslı, Damla Tutuncu, 2023
- Commodity Price Forecasting by Deep Learning. Mert Dallar, Israh Zahid, Isam Barghothi, 2023

- Price Prediction via earnings transcript calls. Zeynep Basik, Batuhan Uz, 2023

- Stock Price and Direction Prediction via Deep Attention-Based Convolutional Neural Networks. Onur Alacam, Tugcan Hoser, Uygar Kaya, Tuna Tuncer, 2022

- Analyzing Transaction Graphs for Price Prediction of Bitcoin. Peker Celik, Eray Erdogan, Umut Cırak, 2022

- Simultaneous FX Price Prediction by Using Temporal Multivariate Graph Neural Networks. Hamza Ayberk Akbalık, Nurettin Burak Altıntas, Ege Öztas, 2022

- Comprehensive Financial Domain Specific Language for Algorithmic Trading. Egemen Iscan, Hasan Erdem Bilgin, Yamac Demirkan Yilmaz, 2022

- Cryptocurrency Price Prediction by Using Sentiment Data and Attention Based Architectures. Berkay Celik, Erdem Er, Muratcan Kılıccı, 2022

- Natural Language Processing and Deep Reinforcement Learning Technologies in Cryptocurrency Trading. Alperen Akyol, Ayberk Orhon, 2022

- Essential Protein Prediction Using Graph Neural Networks. Abdullah Saydemir, Burcu Arslan, 2022

- Crypto-currency Price Prediction Using News and Social Networks Data. Barıs Karaer, Ertan Ayanlar, 2021

- Predicting Market Movements over Supply Chain Network via Graph Neural Networks. Dogukan Dincer Duduoglu, Ertugrul Ozvardar, 2021

- A Cloud-Based Web Platform for Electricity Market Price Forecast. Yaren Sever, 2021

- Financial Sentiment Analysis with BERT. Ilhami Berker Gurcay, Cem Denizsel, Emirhan Demir, 2021

- Match Score Prediction Using Machine Learning. Ahmet Erdem Gonul, 2021

- SCAN EAT AND TREAT(SEAT). Muhammad Abdulwahab Shafiq, Muhammad Ibrahim, 2021

- Predicting Default Probability and Providing an Investment Strategy for P2P Loan Selection. Cem Taha Aker, 2021