

CONTACT INFORMATION Department of Computer Engineering, Bogazici University,  
Bebek, Istanbul, 34342, Turkey  
+90(212) 359-6862  
inci.baytas@boun.edu.tr

RESEARCH INTERESTS Deep learning, adversarial machine learning, time series analysis, biomedical informatics,  
multi-task learning, convex optimization and distance metric learning.

EDUCATION **Michigan State University**, East Lansing, MI, USA

**Ph.D., Computer Science and Engineering**, August 2014 - May 2019

- Thesis: *Contributions to Machine Learning in Biomedical Informatics*
- Advisors: Anil K. Jain and Jiayu Zhou
- GPA: 3.58/4.00
- **Courses**
  - Statistical Methods I
  - Data Mining
  - Machine Learning
  - Design and Theory of Algorithms
  - Deep Learning
  - Advanced Computer Architecture

**Istanbul Technical University**, Istanbul, Turkey

**M.Sc., Electronics and Communication Engineering**, September 2012 - May 2014

- Thesis: *Digital Video Stabilization with SIFT Flow*
- Advisor: Melih Pazarci
- GPA: 3.95/4.00
- **Courses**
  - Probability Theory and Stochastic Processes
  - Statistical Signal Processing
  - Image Processing
  - Computer Vision
  - Detection and Estimation Theory
  - Digital Video Processing
  - Statistical Pattern Analysis and Classification
  - Information Theory

**B.Sc., Electronics and Communication Engineering**, September 2008 - June 2012

- GPA: 3.76/4.00 (Honor List, Ranked 2nd in the faculty)

EXPERIENCE **Assistant Professor** **November 2019 - Current**  
Department of Computer Engineering, Bogazici University  
Istanbul, Turkey

**Research Assistant** **August 2014 - May 2019**

Pattern Recognition and Image Processing Lab, Michigan State University, East Lansing, MI, USA.

Advisor: Anil K. Jain Co-advisor: Jiayu Zhou

### Teaching Assistant

December 2013 - July 2014

Department of Electronics and Communication Engineering, Istanbul Technical University, Istanbul, Turkey

#### Assisted courses

- Signals and Systems,
- Digital Signal Processing Design and Application
- Basics of Electrical Circuits Laboratory

### Teaching

**Bogazici University, Istanbul, Turkey** **Fall 2021**

- CMPE 343 Introduction to Probability and Statistics for Computer Engineers
- CMPE 544 Pattern Recognition

**Bogazici University, Istanbul, Turkey** **Spring 2021**

- CMPE 462 Machine Learning
- CMPE 597 Sp. Tp. Deep Learning

**Bogazici University, Istanbul, Turkey** **Fall 2020**

- CMPE 343 Introduction to Probability and Statistics for Computer Engineers
- CMPE 544 Pattern Recognition

**Bogazici University, Istanbul, Turkey** **Spring 2020**

- CMPE 462 Machine Learning
- SWE 591 Sp. Tp. Principles of Neural Networks and Deep Learning

**Bogazici University, Istanbul, Turkey** **Fall 2019**  
**(September-December 2019)**

- CMPE 343 Introduction to Probability and Statistics for Computer Engineers
- SWE 582 Sp. Tp. Machine Learning for Data Analytic

**Michigan State University, East Lansing, MI, USA** **Fall 2018**  
**(August-December 2018)**

- CSE 491 Introduction to Machine Learning co-taught with Asst. Prof. Jiayu Zhou.
- CSE 802 Pattern Recognition, assisted Prof. Anil K. Jain.

### Internships

- **IBM T.J Watson Research Center**, Healthcare Analytics Research, Yorktown Heights, NY, USA, **May 2017 - August 2017**
- **Alibaba**, The Institute of Data Science and Technologies, Seattle WA, USA, **May 2015 -August 2015**
- **NETAS** (Turkish Telecom Infrastructure Provider), Istanbul Turkey, **August 2011 - September 2011**
- **ASELSAN**, Ankara Turkey, **June 2011 - July 2011**
- **Istanbul Technical University Center for Satellite Communication and Remote Sensing**, Istanbul Turkey **August 2010 -September 2010**

1. **Inci M. Baytas** and Debayan Deb, “Robustness-via-Synthesis: Robust Training with Generative Adversarial Perturbations”, <https://arxiv.org/abs/2108.09713>, 2021.
2. Oguz Kaan Yuksel and **Inci M. Baytas**, “Adversarial Training with Orthogonal Regularization”, *The 28th IEEE Conference on Signal Processing and Communication Applications*, 2020, pp. 1-4, doi: 10.1109/SIU49456.2020.9302247.
3. **Inci M. Baytas**, Cao Xiao, Fei Wang, Anil K. Jain, Jiayu Zhou, “Heterogeneous Hyper-Network Embedding”, *IEEE International Conference of Data Mining*, 2018.
4. Mengying Sun, **Inci M. Baytas**, Liang Zhan, Zhangyang Wang, Jiayu Zhou, “Subspace Network: Deep Multi-Task Censored Regression for Modeling Neurodegenerative Diseases”, *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 2018.
5. Cao Xiao, Ying Li, **Inci M. Baytas**, Jiayu Zhou, Fei Wang, “An MCEM Framework for Drug Safety Signal Detection and Combination from Heterogeneous Real World Evidence”, *Scientific Reports*, vol.8, *Nature*, 2018.
6. **Inci M. Baytas**, Cao Xiao, Xi Zhang, Fei Wang, Anil K. Jain and Jiayu Zhou, “Patient Subtyping via Time-Aware LSTM Networks”, *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 2017.
7. Liyang Xie, **Inci M. Baytas**, Kaixiang Lin and Jiayu Zhou, “Privacy-Preserving Distributed Multi-Task Learning with Asynchronous Updates”, *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 2017.
8. **Inci M. Baytas**, Ming Yan, Anil K. Jain and Jiayu Zhou, “Asynchronous Multi-Task Learning”, *IEEE 16th International Conference on Data Mining*, 2016.
9. **Inci M. Baytas**, Kaixiang Lin, Fei Wang, Anil K. Jain and Jiayu Zhou, “PHENOTREE: Interactive Visual Analytics for Hierarchical Phenotyping from Large-Scale Electronic Health Records”, *IEEE Transactions on Multimedia, Special Issue on Visualization and Visual Analytics for Multimedia*, vol.18, no.11, pp. 2257-2270, 2016.
10. **Inci M. Baytas**, Kaixiang Lin, Fei Wang, Anil K. Jain and Jiayu Zhou, “Stochastic convex sparse principal component analysis”, *EURASIP Journal on Bioinformatics and Systems Biology*, vol. 2016, no. 15, 2016.
11. Kaixiang Lin, Jianpeng Xu, **Inci M. Baytas**, Shuiwang Ji and Jiayu Zhou, “Multi-Task Feature Interaction Learning” *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 2016.
12. Qi Qian, **Inci M. Baytas**, Rong Jin, Anil K. Jain, Shenghuo Zhu, “Similarity Learning via Adaptive Regression and Its Application to Image Retrieval”, *arXiv:1512.01728 [cs.LG]*, 2015.
13. **Inci M. Baytas** and Bilge Günsel, “Head Motion Classification with 2D Motion Estimation” *IEEE 22nd Signal Processing and Communications Applications Conference (SIU)*, Trabzon, Turkey, 2014.

AWARDS AND  
SCHOLARSHIPS

- Ufuk 2020 Eşik Üstü Ödülü, 2020
- 1st Place Poster Award, Department of Computer Science and Engineering Michigan State University, 2017.
- Ranked 2nd in the Faculty of Electrical and Electronic Engineering Istanbul Technical University, June 2012.
- Scholarship for Graduate Education The Scientific and Research Council of Turkey (TUBITAK), 2012-2014.

SERVICE

**Reviewer**

- IEEE Transactions on Artificial Intelligence
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Journal of Biomedical and Health Informatics
- AAAI Conference on Artificial Intelligence, program committee member 2020
- Applied Network Science, 2019
- AAAI Conference on Artificial Intelligence, program committee member 2019
- IEEE Transactions on Services Computing
- Data Mining and Knowledge Discovery, Springer
- Neurocomputing Journal, Elsevier
- Pattern Recognition Journal, Elsevier
- Workshop on Data Mining for Medical Informatics (DMMI), program committee member 2016
- EURASIP Journal on Bioinformatics and Systems Biology, SpringerOpen 2016
- Journal of Electronic Imaging, SPIE 2015