

EDUCATION

- **University of Southern California (USC)** Los Angeles, CA
Ph.D. Student in Electrical and Computer Engineering; GPA: 4.00/4.00 Aug 2020 – Present
Advisor: Prof. Mahdi Soltanolkotabi
- **University of Southern California (USC)** Los Angeles, CA
Master of Science in Electrical and Computer Engineering; GPA: 4.00/4.00 Aug 2020 – Dec 2022
- **Bilkent University** Ankara, TR
Bachelor of Science in Electrical and Electronics Engineering; GPA: 3.95/4.00 Sep 2016 – June 2020
Graduation Rank: 5/153
- **City University of Hong Kong** Kowloon, HK
Exchange Student in Electrical Engineering Jan 2019 – May 2019

JOURNAL PUBLICATIONS

- [1] M. Yurt, M. Ozbey, S. Dar, **B. Tinaz**, and T. Cukur, “Progressively volumetrized deep generative models for data-efficient contextual learning of MR image recovery,” *Medical Image Analysis*, 2021. [Online]. Available: <https://arxiv.org/abs/2011.13913>.
- [2] M. Yurt, S. Dar, M. Ozbey, **B. Tinaz**, K. Oguz, and T. Cukur, “Semi-supervised learning of mutually accelerated MRI synthesis without fully-sampled ground truths,” *IEEE Transactions on Medical Imaging*, 2021. [Online]. Available: <https://arxiv.org/abs/2011.14347>.
- [3] S. U. H. Dar, M. Yurt, M. Shahdloo, M. E. Ildiz, **B. Tinaz**, and T. Çukur, “Prior-guided image reconstruction for accelerated multi-contrast MRI via generative adversarial networks,” *IEEE Journal of Selected Topics in Signal Processing*, vol. 14, no. 6, pp. 1072–1087, 2020. [Online]. Available: <https://ieeexplore.ieee.org/document/9115255>.

PEER-REVIEWED CONFERENCE PUBLICATIONS

- [4] M. Yurt, **B. Tinaz**, M. Ozbey, S. U. H. Dar, and T. Çukur, “Semi-supervised learning of multi-contrast MR image synthesis without fully-sampled ground-truth acquisitions,” in *Medical Imaging Meets NeurIPS*, Virtual Conference, Dec. 2020.
- [5] M. Yurt, S. Dar, **B. Tinaz**, M. Ozbey, Y. Korkmaz, and T. Cukur, “A semi-supervised learning framework for jointly accelerated multi-contrast mri synthesis without fully-sampled ground-truths,” in *29th annual meeting of International Society for Magnetic Resonance Imaging (ISMRM)*, Virtual Conference, May 2021.
- [6] M. Yurt, M. Ozbey, S. U. H. Dar, **B. Tinaz**, K. K. Oguz, and T. Çukur, “Progressive volumetrization for data-efficient image recovery in accelerated multi-contrast MRI,” in *29th annual meeting of International Society for Magnetic Resonance Imaging (ISMRM)*, Virtual Conference, May 2021.
- [7] Z. Fabian, **B. Tinaz**, and M. Soltanolkotabi, “Humus-net: Hybrid unrolled multi-scale network architecture for accelerated mri reconstruction,” in *36th Conference on Neural Information Processing Systems (NeurIPS)*, 2022. [Online]. Available: <https://arxiv.org/abs/2203.08213>.

HONORS AND AWARDS

- **Princeton ML Theory Summer School**: Represented USC among other students from top universities in ML theory, 2022
- **Machine Learning Summer Schools**: Accepted to CIFAR DLRL and MLSS summer schools, 2021
- **Bilkent University Graduate Research Conference (GRC)**: Best paper award for the publication “Semi-supervised learning of mutually accelerated multi-contrast MRI synthesis without fully-sampled ground-truth”, 2021

- **USC Viterbi School of Engineering/Graduate School Fellowship:** Full tuition waiver & stipend during the first year of Ph.D. program, 2020
- **Bilkent University High Honor Student:** High honor student for 8 consecutive semesters, 2016-2020
- **Bilkent University Comprehensive Scholarship:** Full tuition waiver & stipend during the B.Sc. program, 2016-2020
- **IEEEExtreme 11.0 Programming Competition:** Ranked 3rd in Turkey, 39th in IEEE region 8 and 116th among all participants as a team of three, 2017
- **Turkish Intelligence Foundation (TZV) Marathon:** Ranked 11th, 19th, and top 20; 2017, 2018, 2020
- **Nationwide University Entrance Exam (LYS):** Ranked 139th among 2 million students in Turkey, 2016

WORK EXPERIENCE

- **Signal Analysis and Interpretation Lab (SAIL) at USC** Los Angeles, CA
Research Assistant *Sep 2020 - Dec 2021*
 - Person image retrieval via attribute-based text query: worked on matching attributes extracted from both the text query and the target images.
 - Optic nerve photo analysis with ML: worked on distinguishing Psuedopapilledema vs Papilledema from optic nerve fundus images using supervised and self-supervised techniques, under the supervision of Prof. Shrikanth (Shri) Narayanan.
- **National Magnetic Resonance Research Center (UMRAM)** Ankara, TR
Undergraduate Researcher & Research Intern *Oct 2018 - Apr 2020*
 - Integrating determinantal point process (DPP) sampling as an active learning technique to advance adversarial learning protocols.
 - Transfer learning to enhance generalizability and reliability of MRI synthesis by learning the mapping among different MRI datasets to standardize intensity differences.
 - Semi-supervised learning of accelerated multi-contrast MRI synthesis, undersampled across both contrast sets and k-space coefficients by leveraging randomized sampling masks across training subjects, under the supervision of Prof. Tolga Çukur.
 - Related concepts: Semi-Supervised Learning, Point Processes, Generative Adversarial Networks (GAN)
- **Imperial College London** London, UK
Research Intern at Intelligent Behaviour Understanding Group (iBUG) *July 2018 - Sept 2018*
 - Contributed to the development of a novel audio-visual dataset, and detection of blinks and mouth openings in videos.
 - Integrated a face detection algorithm to an existing face alignment tool which increased the performance over 45° poses under the supervision of Prof. Maja Pantic and Dr. Stavros Petridis.

TEACHING EXPERIENCE

- **University of Southern California (USC)** Los Angeles, CA
Teaching Assistant *Jan 2022 - May 2022*
 - EE562 Random Processes in Engineering: holding office hours and discussion sessions, preparing and grading homeworks and exams.

SKILLS

- **Language:** English (fluent, TOEFL iBT: 109/120), Turkish (native)
- **Programming:** Python, MATLAB, C/C++, R, \LaTeX
- **Libraries:** PyTorch, Scikit-Learn, OpenCV, NumPy, Matplotlib

EXTRACURRICULAR ACTIVITIES AND HOBBIES

- **USC exploreCSR Workshop Series on Computational Media Intelligence (2021):**
 - Mentoring undergraduates through workshop series in computational media intelligence sponsored by Google Research.
- **Bilkent IEEE Student Branch Active Member (2016-2020):**
 - "Road to University" Volunteer (2016-2017): Introducing engineering and campus life to high school students from all around Turkey.
 - Graphics Design Team: Made several posters for the events organized by the student branch of IEEE.
- **Hobbies:** Playing the piano, Amateur Photography, Travelling, Hiking/Camping, Reading, Trekking