Anil Kumar Vadathya

anil.rgukt@gmail.com ❖ (832) 660-7520 ❖ Houston, TX ❖ webpage

Research scientist with >5 yrs experience in machine learning, interested in solving challenging problems in healthcare to create a measurable impact.

WORK EXPERIENCE

Houston Methodist Hospital **Nov. 2024 – Present**
Research Scientist (AI/ML), Neal Cancer Center, Research Intitute *Houston, TX*
- Deploying AI models for cancer research, epidemiology

Rice University **Nov. 2018 – Present**
Research Engineer, Digital Health Initiative, ECE *Houston, TX*
Visting Engineer, CNRC, Baylor College of Medicine
- Led machine learning efforts to train, test, and deploy models for FLASH-TV, a screentime tracking tool
  - addresses **pressing** needs of pediatricians to study **screentime effects** on childhood **obesity**
  - provides **objective** measurements, more accurate (**>85% accuracy**) over parents' self-report
- Built a gaze tracking tool using state-of-the-art **face detection, recognition and gaze estimation** methods.
  - Runs **real-time** on edge devices, deleting images after analysis, **preserving privacy**
- FLASH-TV efforts (2018-2021) led to an ongoing NIH PO1 grant (2022-2027)

EDUCATION

Indian Institute of Technology (IIT) Madras **June 2018**
MS in Electrical Engineering *Chennai, India*
- Masters thesis on "generative models for image restoration" won Qualcomm Innovation Fellowship-India

Rajiv Gandhi University of Knowledge Technologies **May 2015**
B. Tech in Electronics and Communications Engineering *Basar, India*

RELEVANT PUBLICATIONS

- **Anil Vadathya et al.** "FLASH-TV a machine learning pipeline to passively measure children's TV viewing: validation studies of the system," under review at *Nature scientific reports*, 2024
- **Anil Vadathya et al.** "An Objective System for Quantitative Assessment of Television Viewing Among Children (Family Level Assessment of Screen Use in the Home-Television): System Development Study," *JMIR Pediatric and Parenting*, 2022
- **Anil Vadathya**, Sharath Girish, Kaushik Mitra, "A unified learning-based framework for light field reconstruction from coded projections," *IEEE Transactions on Computational Imaging*, 2019

PROFESSIONAL ACTIVITIES

- Reviewer for journals - IEEE TPAMI, IEEE TCI, Optics Express, IJCV
- Reviewer for conferences - CVPR, ECCV, WACV, ICIP, ICHI, Face and Gesture

SKILLS

Machine learning, computer vision, deep neural networks, image analysis, scikit-learn, numpy; Training, optimizing neural networks; Python, PyTorch, Tensorflow, MXNet, C, BASH, Matlab; GitHub, Docker, Linux;