

EDUCATION

The University of Texas at Austin, Master of Science, Electrical and Computer Engineering (GPA: 3.8/4) **May 2024**
IIT Kharagpur, Bachelor of Tech. (Honors), Electrical Engineering, Minor in CS (GPA: 8.8/10) **July 2020**

PUBLICATIONS

“Socioeconomic Bias in LLMs” | Singh S., Keshari S., (current)
“Annotating sleep states in children from wrist-worn accelerometer” | Ram A., Sundar S.V.S., Keshari S., Jiang Z. ([read here](#))
“Stable Remaster: Bridging the Gap Between Old Content and New Displays” | Paull N., Keshari S., Wong Y. ([read here](#))
“Categorizing ENDS-related Tweets: using BERT Topic Modeling” | Murthy D., Keshari S., Arora S., Yang Q. (Submitted)
“Decoding Brain Motor Imagery: with various Machine Learning techniques” | Jana G., Karnei C., Keshari S. ([read here](#))
“Large Cigar Detection in social media using YOLOv7” | Kong G., Keshari S., Ouellette R., Lee J., Murthy D. (Submitted)
“Facial asymmetry: a Vision based behaviometric index for interview assessment” | Keshari S. et al., ([read here](#))

RESEARCH AND INDUSTRY EXPERIENCE

UT Austin Power Electronics Lab: Graduate Teaching Assistant (ECE462L & ECE394J) **Sept 2023 — Present**
Advisor: Dr. Brian Johnson **Austin, Texas**

Texas Instruments: Systems Engineer **May 2023 — August 2023**
Internship - Optimized system performance by comparison of GaN and Si devices **Dallas, Texas**

UT Austin CML: Graduate Research Assistant: Computer Vision/NLP **Nov 2022 — May 2023**
Advisors: Dr. Dhiraj Murthy, Dr. Anna Wilkinson **Austin, Texas**

- Developed Vision-based computational models/pipelines to identify mechanisms underlying electronic nicotine delivery system (ENDS)-related social media exposure and ENDS use among young adults
- Investigated social media data using Oracle Cloud (scraping), and deployed custom Yolo and BERT models (inference) to explore multi-modal ML techniques [*Paper Presentation: SRNT, San Antonio*]
- Supervised undergraduate research assistants working on this project as part of the [Computational Media Lab](#)

Jaguar Land Rover **Sept 2020 — August 2022**
Power Electronics Software Engineer **Coventry, United Kingdom**

- Filed a patent (under review) for electric vehicle charging hardware and software
- Investigated Computer Vision R&D projects like driving assist technology and fault prediction for validation

IIT Kharagpur Rekhi Center: Undergraduate Research Assistant: Computer Vision **Jan 2020 — Sept 2020**
Advisors: Dr. Manas K Mandal, Dr. Priyadarshi Patnaik **keshariS/EmotionAnalysis**

- Designed an algorithm for measuring facial asymmetry and emotion incongruity from real time videos using CNNs.
- Developed an application using tkinter GUI library for a user-friendly interaction with the software.
- Enhanced accuracy of Facial emotion recognition model from 70% to 87% using custom datasets and AWS

ITC Limited: Operations Research Intern **May 2019 — July 2019**
Skills - Data Analysis, Operations Management, Strategic Planning and Market Research **Mysuru, India**

IIT Kharagpur EV Research Group Lead **Oct 2017 — Mar 2020**
Advisor: Dr. Vikranth Racherla **Read: [Official Vehicle Launch Story](#)**

TECHNICAL SKILLS

Programming LLMs, python (opencv, keras, scikit-learn), C/C++, OCI, AWS, Git, HTML, CSS
Software [CARLA Simulator](#), Jupyter, PyTorch, VS Code, MATLAB, ROS, PSIM, Cadence

RELEVANT COURSEWORK

Graduate Generative AI, AI & Society, Applied ML, Advanced CV, Autonomous & Connected EVs
Coursera Specializations Self Driving Cars (University of Toronto) || Deep Learning || Machine Learning (Stanford)
Undergraduate Advanced Image Processing, Machine Learning, Data Structures & Algorithms

AWARDS & HONORS

2023 **Professional Development Award** (awarded by UT Austin ECE for conference presentation)
2020 **Systems Society Award** (Best B. Tech Thesis among Electrical, Energy and Instrumentation Engineering depts.)
2019 **Silver Trophy** ([Inter IIT Tech Meet 8.0](#), IIT Roorkee: Tech competition among 20 major IITs)
2016 **KVPY National Fellow** (funded by the Department of Science and Technology, Government of India)