

EDUCATION

- **University of Maryland** College Park, MD
Master of Science in Computer Science; GPA: 3.97/4 Aug. 2018 – May 2020
- **IIIT Delhi** New Delhi, India
Bachelor of Technology in Computer Science and Engineering; GPA: 8.67/10 Aug. 2014 – May 2018

EXPERIENCE

- **Adobe** San Jose, CA
Software Engineer, Globalization Team July 2020 - Present
 - Leading the research initiative to apply machine learning based solutions to enhance customer experience of Adobe's global products within the Digital Media organization. Solve problems such as improper recommendation, font discrepancies between different languages targeting global users.
 - Design and prototype deep learning models spanning across the space of image understanding, recommendation using multimodal data, semantic search, cross-lingual learning to support products as well as internal tools.
 - Internationalization and localization for various Creative Cloud products (CC-Web, CC-Education, CC-X). Currently focused on React, JavaScript, web technologies, and world-readiness of Adobe's Digital Media products.
 - Work on Agile Development cycles to adopt frequent launches, working closely with International Program Managers, Product Managers, engineers, Quality Engineers and localization vendors.
- **Adobe** San Jose, CA
Software Engineering Intern May 2019 - Aug 2019
 - Developed a model to localize tutorial videos for Creative Cloud on Adobe's HelpX using various image processing and OCR techniques in addition to employing NLP techniques for semantic analysis and text correction.
 - Implemented frame similarity and batch processing to improve the speed and processing power of the service.
- **University of Maryland** College Park, MD
Graduate Teaching Assistant Aug 2018 - May 2020
 - Teaching assistant : Object Oriented Programming, Operating Systems, Android Programming, iOS Programming
- **Carnegie Mellon University** Pittsburgh, PA
Research Intern, Guide: Dr. Abhinav Gupta May 2017 - Aug 2017
 - Built a CNN based classification system to identify the material or its properties by listening to the sound produced by it when struck in different ways. Tried various reinforcement learning approaches to minimize the number of steps required for identification.
 - Programmed Baxter robot to strike objects in various orientations to help collect the dataset more efficiently.
- **Infosys Centre for Artificial Intelligence, IIIT Delhi** New Delhi, IN
Undergraduate Researcher, Guide : Dr. Chetan Arora May 2016 - Nov 2017
 - Built a system to parametrize the generalized 6D pose vector into fewer parameters by modifying the existing LSD-SLAM Algorithm. Also created a dataset for constrained motion in various environments.
 - Our method processed the input video 40% faster than regular LSD-SLAM with 6 parameters. We improved reprojection error by 32%. Also performed qualitative evaluation with augmented reality objects.

PROJECTS

- **Perceiving Human Emotions from Multiple Modalities:** Built and compared 4 models for understanding human emotions using a combination of facial, speech and textual data. Implemented latent fusion, early fusion, CCA, Multiplicative Combination based multimodal approaches for training with CNN/LSTM based architectures.
- **3D object segmentation from pretrained 2D datasets:** Leveraged well-built 2D datasets such as Microsoft COCO and PASCAL VOC to pre train a model that can perform 3D object-part segmentation and shape classification. 3D data is harder to collect datasets due to high time, memory and monetary requirements
- **Question Answering for Quizbowl:** Built and compared deep learning models tailor made for quizbowl questions using approaches like TF-IDF, DAN, LSTMs.

TECHNICAL SKILLS

Python, C++, Java, PyTorch, Tensorflow, Android, Django, Flask, Keras, SQL, Tableau, R, JavaScript