SHREEDHAR GOVIL

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EDUCATION

Indraprastha Institute of Information Technology *August 2016 - August 2020*
Bachelor in Technology CGPA: 8.41
Computer Science and Applied Mathematics

RESEARCH PROJECTS

Audio Visual Consistency Detection
Guide: Dr. AV Subramanyam
A novel architecture to detect fake videos by learning the temporal and spatial association of the face structure of a person. This can be potentially used to effectively detect fake video in almost every setting regardless of the forgery method.

RESEARCH INTERNSHIPS

Visual Wildlife Monitoring IIITD May,18 - July,18
Research Intern

To identify the species and/or individual in an image. This project is in collaboration with Wildlife Institute of India, and we work with camera trap images obtained from the field. Applying techniques from robust statistics and machine learning to ensure reliable detection and identification of animals in cluttered backgrounds.

SELECTED PROJECTS

SemiGo
An app that matches peers together whos destinations are near your own and around similar time. Thus enabling them book their cab and travel together. The UI is designed by keeping various design techniques in mind and made such that it is very intuitive to the user.

Samurai Humanoid Robotic Hand
3D printed humanoid hand capable of grasping and holding objects and can be controlled via muscle sensors, voice sensors and remote control. Useful for amputees and extreme climate conditions. Controlled by Arduino Board.

Removal of rain from single images using CNN
Program that can remove rain from rainy images. Implemented and studied using various CNN based deep learning and image processing methods.

Website for MAMC Anaethesia Update
Created and maintained wesbite for MAMC Anaesthesia Update teaching course for the year 2018 and 2019. Website implemented using Jekyll framework.

Vehicle Driving Assistant
Modeling and implementation of a vehicle driving assistant program capable of detecting lanes, traffic signs, pedestrians and cars. Implemented using image processing and deep learning techniques.

New Aggregator
News Aggregator that uses my favorite sources. Extracts, processes and displays them using RSS feeds, JavaScript, and HTML.

TECHNICAL STRENGTHS

Programming Language	JAVA, Python, C++, MATLAB, HTML, R
Tools	Bash, Git/GitHub, Android Studio
Frameworks	Scikit-learn, Pytorch, Tensorflow, Jekyll

RELEVANT COURSES

Computer Science

Machine Learning, Computer Vision, Digital Image Processing, Designing Human Centered Systems, Theory of Computation

Mathematics

Introduction of Functional Analysis, Complex Analysis, Scientific Computing, Game Theory, Linear Optimization, Stochastic Processes and Applications

Others

Foundations of Finance, Information Technology and Society, Introduction to Quantitative Biology, Big Data Mining in Healthcare

OTHER EXPERIENCE

Teaching Assistant

Introduction to Programming (Monsoon 2019), Introduction to Engineering design (Winter 2019), Theory of Computation (Winter 2020)

INTERESTS

- Machine Learning, Artificial Intelligence, Image processing, Web development
- Open source software
- Algebra, Graph Theory, Linear Algebra, Algorithms