

## Education

- 2019–current **University of Maryland, College Park**, *GPA: 3.95/4.0.*  
PhD in Computer Science – commencing fall 2021 – Research focus: Computer vision and Machine learning  
Masters in Computer Science (Class of 2021) – Graduate Research Assistant – Advisor: Dr. Abhinav Shrivastava
- 2013–2017 **Birla Institute of Technology and Sciences, Pilani Campus.**  
Bachelors of Engineering (Hons.) in Electronics and Instrumentation

## Publications

- Published 'Diverse Video Generation using Gaussian Process', **G. Shrivastava**, A. Shrivastava, *International Conference on Learning Representations. (ICLR) 2021*
- 'Hierarchical Video Prediction using Relational Layouts for Human-object Interactions', N. Bodla, **G. Shrivastava**, R. Chellappa, A. Shrivastava, *Conference on Computer Vision and Pattern Recognition. (CVPR) 2021*
- 'GeoDict: An Integrated Gazetteer', J. Fize, **G. Shrivastava**, *12th International Conference on Computational Semantics workshop LOTKS (IWCS) 2017*
- Under Submission 'Learning What Not to Model: Gaussian Process Regression with Negative Constraints', **G. Shrivastava**, H. Shrivastava, A. Shrivastava, *International Conference on Machine Learning. (ICML) 2021*
- 'Recognizing Transforming Actions via Object State Transformations', N. Saini, **G. Shrivastava**, S.S. Rambhatla, A. Shrivastava, *International Conference on Computer Vision. (ICCV) 2021*

## Research Experience

- Feb - July 2019 **University of Maryland, College Park**, *Faculty Assistant*, (Dr. Abhinav Shrivastava, Dr. Larry Davis).  
Worked towards the realization of deep generative models for the synthesis of new video frames. Also, mentored three intern/undergrad projects of Naman Jain (IIT Bombay), Mohit Jain (IIT Roorkee) and Chris Yue (UMD).
- April - Sept 2018 **National University of Singapore**, *Visiting Researcher*, (Dr. Harold Soh).  
Worked towards the development of a novel temporal machine learning algorithm to predict the mortalities in the city demographics affected by environmental stressors like air pollution, extreme temperatures, etc.
- Aug–Jan 2018 **Australian National University**, *Remote collaboration*, (Dr. Young Lee).  
Developed an original approach with Generative Adversarial Network (GAN) models to launch a DDoS attack mimicking a flash crowd event to fool the defense mechanism of cyber security system of target website.
- Jan–Jun 2017 **CNRS Research Unit Montpellier, France**, *Bachelor's Thesis*, (Dr. Mathieu Roche).  
Processed and created a method to extract and disambiguate the spatial entities from processed textual data. During the internship we also developed a new spatial knowledge base -Geodict (Published Work).
- May–Aug 2015 **Xerox Research Center India Bangalore, India**, *Summer Internship*, (Dr. Vaibhav Rajan).  
Modeled a recommender system using the IMC Matrix Completion for prognosis in patients admitted in the I.C.U.

## Technical Skills

- DeepNN - GPyTorch, PyTorch, TensorFlow, Keras, Theano
- Languages - C, Java, Python, R, Matlab/Octave, HTML5, CSS, Verilog
- Softwares - L<sup>A</sup>T<sub>E</sub>X, OpenCV, Adobe Creative Suite, AutoCAD, Jupyter Notebook, Cadence

## Academic Services/Achievements

- 2021 Secured the **Dean's Fellowship** for pursuing a PhD degree in Computer Science at University of Maryland
- 2021 **Reviewer** for computer vision conferences. *CVPR - 21, ICCV - 21*
- 2020 Served on **Masters admission committee** for computer science department at the University of Maryland
- 2015 Ranked among **top 3%** out of 2700 participants in a **Kaggle** featured competition (silver medal awarded)
- 2012 Selected for estimable Kishore Vaigyanik Protsahan Yojana (**KVPY**) **scholarship** by Govt.Of India