

# Shashank Srikanth

## Education

- 2016-2021 **BTech and MS by Research in Computer Science**, *International Institute of Information Technology*, Hyderabad, **CGPA: 9.69 / 10.0**.
- 2014-2016 **Senior Secondary**, *Amity International School*, Saket, Delhi, **95.8%**.
- 2013-2014 **Secondary**, *Amity International School*, Saket, Delhi, **CGPA: 10.0 / 10.0**.

## Publications

- 2019 **INFER: Intermediate representations for future prediction**, *Accepted at IEEE IROS 2019*, First author paper.  
Project Page: [INFER](#), Paper link: [Arxiv](#)
- 2019 **Distracted Driving Posts on Social Media**.  
Under review at ICWSM 2020, \* (Title has been modified due to double blind review)
- 2019 **Is change the only constant? Profile change perspective on #LokSabhaElections2019**.  
Under review at CODS-COMAD 2020, Paper link: [Arxiv](#)
- 2019 **Don't cross that stop line: Characterizing Traffic Violations in Metropolitan Cities**.  
Under review at CODS-COMAD 2020, Paper link: [Arxiv](#)

## Experience

- July 2018 - **Undergraduate Researcher, Precog Lab**, *Prof. Ponnurangam Kumaraguru*, IIIT-Delhi.  
Present As part of 2019 Indian general elections project, I analyzed social media accounts of more than 60 million twitter users to detect twitter bots and characterize profile change behaviour.  
Was also part of a project that involved writing python scripts & scrapers to collect video data from Snapchat Maps. Implemented deep learning models based on 3D Resnets to classify these videos as driving & non-driving and performed spatiotemporal analysis.
- May 2018 - **Undergraduate Researcher, Robotics Vision Lab**, *Prof. Madhava Krishna*, IIIT-H.  
Present Implemented deep learning models to compute semantic, instance segmentation & disparity maps of outdoor scenes. Designed deep learning models based on LSTMs and CNNs to predict the future trajectory of vehicles in roads given the past trajectory.
- June 2019 - **Data Science Intern**, *Prof. Siddharth Sharma*, ISB, Mohali.  
Present The work involves analysing the job postings made in US in the Indeed website to infer the impact of new branches opened by large companies and start ups on the job market.
- May 2017 - **Web Development Intern**, *SynapseIndia*, Noida.  
June 2017 Developed a Custom Content Management System using MySQL, PHP, CakePHP & Python. Implemented Payment Gateway using the PayPal API
- Aug 2018 - **Teaching Assistant**, *IIIT-H*.  
Present **Operating Systems & Digital Signal Analysis**: The work involves taking tutorial and lab sessions, explaining concepts of given course to 2nd year undergraduate students

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## Projects

Wikipedia Search Engine	Implemented efficient and scalable search engine on Wikipedia data. Used tf-idf statistic for ranking of documents. Implemented multi level indexing and used threading for fast retrieval of documents.
Machine Learning	Used PCA to reduce dimensionality of images and applied popular classifiers like Naive Bayes & Neural networks to classify the images into different categories. Also, designed deep neural networks based on LSTMs to perform time series prediction of Sine Waves
Computer Vision	Computed the camera calibration matrix using Zhang's method. Reconstructed the 3D scene up to a scale given multiple views of the scene
AI Bot	Built a bot for playing 4*4*4*4 ultimate tic-tac-toe using algorithms such as minimax and alpha-beta pruning. Implemented custom heuristics, caching, iterative deepening search, caching etc. The bot placed third in the Bot championship conducted
Networks	Implemented a client server architecture using sockets with both persistent and non persistent connections. Also developed a proxy server with features such as threading, LRU caching, non-blocking etc.
Bash Shell	Developed a shell in C using POSIX system calls. Implemented features like killing a process, input/output redirection, piping and signal handling
Database Engine	Implemented a mini SQL engine that supported various SQL operations like select, join & where clause.

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## Scholastic Achievements

Dean's Merit List	Top 5 rank in the department, selected in Dean's Academic Merit List for all the semesters (Awarded to top 5% performers)
Dean's Research List	Received the Dean's Research Award for excellence in research
KVPY	Secured rank 560 in Kishore Vaigyanik Protsahan Yojana, a Govt. of India Initiative
JEE Mains	Secured rank 871 in JEE Mains out of 1.2 million candidates
ML	Secured top 100 all India rank in FlipkartGrid ML challenge

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## Technical Skills

Working Knowledge	Python, C, C++ (STL), Linux, MATLAB, PyTorch, HTML/CSS
Past Experience	Tensorflow, Flask, SQL, Javascript, Selenium, Scikit-learn, OpenGL

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## Courses

Research Stream	Information Retrieval, Machine Learning, Deep Learning, HCI, Optimization Methods, Big Data Analysis, Reinforcement Learning, Robotics & Computer Vision
Computer Science	Data Structures, Algorithms, Databases, Software Design, Artificial Intelligence, Graphics, Operating Systems, Computer Networks
Mathematics	Linear Algebra, Probability, Graph Theory, Group Theory, Differential Equations

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## Other Achievements

German Proficiency	Awarded Goethe-Zertifikat B1 for competency in German language by the Goethe-Institut
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