Srinidhi Hegde

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Education

- Indraprastha Institute of Information Technology Delhi
 ^o B.Tech, Computer Science and Engineering
- Suraj Bhan D.A.V Public School, New Delhi ^o All India Senior School Certificate Examination (AISSCE) by CBSE for XIIth grade

Suraj Bhan D.A.V Public School, New Delhi
 Central Board of Secondary Education (CBSE) for Xth grade

Technical Skills

- Expertise Area: Computer Vision, Virtual and Augmented Reality, Machine Learning, Computer Graphics and Android Development
- Programming Languages: C++, C, Java, Python, MATLAB, GLSL
- Tools and Technologies: OpenCV, Caffe, Theano, Hadoop, Spark, OpenGL, CUDA, Qt, .NET, CryEngine, Antlr, Ruby on Rails, AVR Programming
- Technical Electives: Machine Learning, Computer Vision, Convex Optimization, Probabilistic Graphical Models, GPU Computing, Computer Graphics, Artificial Intelligence, Big Data Analytics, Data Mining, Compilers, Mobile Computing, System and Network Administration

Publications

• **S. Hegde**, R. Perla, R. Hebbalaguppe, E. Hassan, "GestAR: Real Time Gesture Interaction for AR with Egocentric View". IEEE International Symposium on Mixed and Augmented Reality (ISMAR), 2016

Work Experiences

Teaching Assistant, GPU Computing

' Guide: Dr. Ojaswa Sharma

Designing course curriculum, CUDA assignments and projects for the course of GPU Computing at Graduate and Post Graduate level at IIIT-Delhi.

Software Development Intern, HEICO, India

^o Guide: Mr. Jattinder Singh

Fine-tuned control of Fatigue Testing Machine(FTM) used for evaluating material strength and fatigue visualization. Worked with .NET technology for developing data analysis tool for PID controller data of FTM.

Research Intern, TCS Innovation Labs, Gurgaon

′Guide: Ramya Hebbalaguppe, Dr. Ehtesham Hasan

Augmented Reality with Google Cardboard for Android Platform. Development of hand gesture interaction techniques for Google Cardboard for AR along with UI development and text rendering.

January, 2017 - Present

January, 2017 - March, 2017

May,2016 - Aug,2016

Overall GPA: 8.63/10

2013 - Present

2011 - 2013 *Percentage: 94.2%*

2009 - 2011 Overall GPA: 10/10

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Teaching at AINA- An Initiative for National Advancement

^o Guide: Mukund Agrawal

Providing elementary education and personality development training for underprivileged children.

Summer Intern in Sensor Based Chessboard Project

^o Guide: Dr. Somitra Kumar Sanadhya

Designing analog circuits, handling AVR based programming (on microcontrollers).

Projects

Robust 3D Reconstruction of Indoor Scenes using Deep Learning

Guide: Dr. Saket Anand and Dr. Ojaswa Sharma

The projects involves localization and depth estimation for generating a 3D model of indoor scenes using CNNs. We developed an end-to-end pipeline for solving this problem. Tools & Technologies: Caffe, Theano, OpenCV, PCL

American Sign Language Recognition Using Heirarchical Rank Pooling
 ^o Guide: Dr. Saket Anand and Dr. Anubha Gupta
 Sep,2016 - Nov,2016

This was a course project for Machine Learning coursework. The problem we aimed to solve involves automatically recognizing sign language videos as glosses using heirarchical rank pooling features in a modified CaffeNet architecture. Tools & Technologies: Caffe, OpenCV

Fault Tolerant Area Coverage in Multi-Agent Systems

Guide: Dr. P.B Sujit

Solving the patrolling problem of Multi-Agent Systems under the constraint of area coverage with fault tolerance. Tools & Technologies: MATLAB

Vision Based Outdoor Localization of IIIT-Delhi Campus

Guide: Dr. Saket Anand

Estimating GPS location of user from a single image involving *location recognition, camera motion estimation and position triangulation*. This application was interfaced by an Android mobile application. Tools & Technologies: OpenCV, Android, Flask

Modelling Vegetations with L-systems using an Image

Guide: Dr. Ojaswa Sharma

Developing a novel technique to convert a single captured image of tree to a 3D model using user-guided brush strokes. The intricate tree details are handled by employing L-Systems. Tools & Technologies: Qt/C++, OpenGL, GLSL

Awards and Achievements

- o Selected for fully-funded scholarship for attending CVS Vista Summer School 2017 conducted at York University, Canada.
- Most read research publication @TCS Research with 300+ reads globally.
- o First Runner-up in semi-finals of Annual Science Quiz 2009, held at National Science Center, Delhi.
- Junior Science Talent Search Examination (JSTSE) by Directorate of Education, Delhi State Govt. Obtained 33rd rank in Delhi State.

Positions of Responsibility

- o Publicity & Jury Team Research Showcase'17, IIITD February, 2017 April, 2017
- o Event Head BrainFuzz at Esya'16, IIITD May,2016 August,2016
- o Core Team and Rendering Team, Virtual Campus Project at IIITD May, 2015 Dec, 2015
- Teaching Assistant at IIITD for Refresher Module of Data Structures and Algorithms for incoming M.Tech batch Jun,2015 Aug,2015
- o Moderator for Rebuttal Online Debate Event at Esya IIITD's Tech Fest Aug,2014

Jan,2016 - May,2016

Feb,2016 - Apr,2016

Aug,2015 - Dec,2015

Jan,2015 - Dec,2015

May,2014 - Jul,2014

August, 2016 - Present

Interests and Hobbies

- Tabla and Indian Classical Music
- Competitive Programming
- Football

References

Available on request.