

SANGEETHA GRAMA SRINIVASAN

Madison, United States ◇ sgsrinivasa2@cs.wisc.edu

Git handle: sanggs ◇ Portfolio: <https://sangeetha-gs.weebly.com/>

EDUCATION

University of Wisconsin Madison

MS Computer Science (Traditional MSCS Program)

Department of Computer Science

September 2019 - Present

1st Semester

National Institute of Technology Karnataka

Bachelor of Technology - Computer Science

Department of Computer Science and Engineering

July 2014 - May 2018

Overall GPA: 9.21/10

Sri Bhagawan Mahaveer Jain College

12th Grade, Karnataka Pre-University Board

Science Stream

July 2012 - May 2014

Percentage: 96.67

Sri Kumaran Childrens' Home

10th Grade, Karnataka SSLC Board

Jun 2002 - May 2012

Percentage: 98.40

WORK EXPERIENCE

Adobe, Bangalore, India

Member of Technical Staff, Core Technologies and Products

Jun 2018 - Aug 2019

1 year 2 months

- CoreSync is a platform used to sync files across multiple devices of a user. I work on the upload-download engine used to achieve the same.
- Some of my work includes developing a sample application on Windows (an MFC application) that demonstrates the use of our cloud platform, automating the build process using CMake, developing a common networking library that can be used by all Adobe products for accessing files on cloud.
- I also worked on adding some instrumentation to monitor the health of our platform. I developed some SQL scripts that can mine the data collected and represent them in the form of dashboards, that give an overview about the health of our product.

PUBLICATIONS

Sangeetha GS, Vignesh Radhakrishnan, Prabhu Prasad, Khyamling Parane and Basavaraj Talawar, *Trace-Driven Simulation and Design Space Exploration of Network-on-Chip Topologies on FPGA* - Accepted at the 8th ISED Conference 2018. ([Link](#))

Sangeetha GS, Shruti Singala, Samanvita Sastry, Praveen Bhaskar Ramteke, Shashidhar Koolagudi, *Modeling Human Face and Hand Movement for Animation* - Presented at the 12th INDIACom International Conference, 2018. ([Link](#))

INTERNSHIPS

Adobe, Bangalore

May 2017 - July 2017

Automating Image Editing in Adobe Lightroom

- Using concepts from Image processing and Machine Learning, I worked on optimizing the local selection (brush) tool in Lightroom. I also worked on palette-based matching for a pair of images and an automatic selection tool for Lightroom.

IISc, Bangalore

May 2016 - July 2016

Form Differencing Tool, Research Project, Programming Languages Lab

- The tool extracts information about database accesses that are present in PL/SQL code and Meta-data of Oracle Forms. It performs CRUD (Create, Read, Update and Delete) analysis and brings out differences between the two forms by analysing the CRUD and related information. We have used Clustering Algorithms to automate the process to an extent.
- We also implemented Slicing Techniques to bring out Logical Differences between the two forms. The results are being evaluated by Nucleus Software, India.

ACADEMIC PROJECTS

Trace-Driven Simulation and Design Space Exploration of Network-on-Chip Topologies on FPGA

July 2017 - May 2018

Bachelor Thesis

- We have developed a Trace-driven NoC simulator for Mesh, Star, Ring and Butterfly topologies.
- We implemented a traffic generator module that processes trace files of the PARSEC benchmark and feeds it to the NoC to measure the latency of each topology. The work has been accepted at the 8th International Symposium on Embedded Computing and System Design (ISED) conference.

Modeling Face and Hand Movements for Animation

Feb 2017 - April 2017

Mini Project, Computer Graphics

- The application records human motion and reciprocates the same on 2D virtual objects using markers. The software simplifies the process of animating 2D objects.
- The work has been presented at the 12th INDIACom International Conference and is to be published in IEEE Explore. The paper can be found *here*.

Smart Water dispensers using Internet of Things (IoT)

March 2016

GE Edison Challenge, Bangalore

- Developed a working prototype of a clean drinking water distribution system as a digital-physical solution to the drinking water crisis in India. The water flow could be controlled from a mobile device and the water quality metrics were displayed on it. This project received the *Amazing Team Award* at GE Edison Challenge, 2016.

Building an AGV - Automated Guided Vehicle

Oct 2015 - May 2016

Solve Lab, Centre for System Design, NITK

- This was an Industry-Institute collaboration by Daimler, India to develop an Automated Guided Vehicle under 4000 USD by April 2016 at NITK.

- I have calibrated the display and developed a GUI application that displays functionalities of the AGV such as soft stop, battery level etc... It runs on a Raspberry Pi and uses multithreading.

SCHOLARSHIPS, AWARDS AND ACHIEVEMENTS

Runner-up, Cloud Tech Hackathon - Adobe: Secured special mention and a reward in the Cloud Tech Hackathon held at Adobe for my idea on Decentralised storage using IPFS. [NOVEMBER 2018]

Amazing Team Award : One among the top 25 finalists out of 350 entries at the GE Edison Challenge, 2016. [MARCH 2016]

CSAB JEE Main Scholarship : Awarded a scholarship for securing a position in the top 0.1% amongst 1,200,000 candidates in JEE Main Examination, 2014. [MAY 2016, 2017]

KCET Rank 20 : One in top 20 at the Karnataka Common Entrance Test (KCET) Examination out of 100,000 students. [JUNE 2014]

School Topper : Secured first position in 10th grade examination. [MAY 2012]

NTSE Scholar : Cleared the National Talent Search Examination (NTSE), India, secured 9th rank in the state and received state-level scholarship [SEPTEMBER 2010]

TECHNICAL SKILLS

LANGUAGES: MIPS, VERILOG, C, C++, Java, Python, MySQL, HTML, CSS.

SOFTWARES: GIT, Xilinx, ArgoUML, ANTLR4, MFC

OTHERS: Adobe Photoshop

LEADERSHIP ROLES AND EXTRA CURRICULAR ACTIVITIES

Leadership Roles

- **Joint Convener, TECHNITES, NITK** - Led a team of around 15-20 people to organise a series of software projects for an event known as TECHNITES, during the technical fest at NITK - ENGINEER.
- **Secretary, Artists' Forum, NITK** - Co-led a group of 90 art enthusiasts in NITK to put up displays and exhibitions during major fests and events at NITK.

Extra Curricular and Volunteer Activities

- **Scribe Volunteer** - I was a scribe for blind students of *Sri Ramana Maharshi Academy for the blind*, during their grade 10 exams.
- **KREC Volunteer** - I taught english for grade 4 and 5 students who study at NITK Kannada Medium School.
- **Executive Member, Computer Society, IEEE-NITK** - I was a member of Computer Society - IEEE, NITK Student Chapter and was a part of organising the IEEE Discover Conference, 2015.
- **Executive Member, Women-in-Engineering, IEEE-NITK** - I actively participated in the Women-in-Engineering activities conducted by IEEE-NITK student chapter.