

Pavan M

PERSONAL DATA

ADDRESS: B-112, Mega Tower - 3, NITK Boys' Hostel, NITK Surathkal
PHONE: +91 9611580628
EMAIL: pavan.mlv@gmail.com

PUBLICATIONS

Santhi Natarajan, Krishna kumar N, **Pavan M**, Debnath Pal and S K Nandy
“**ReneGENE-DP: Accelerated Parallel Dynamic Programming for Genome Informatics**” presented in IEEE international conference on Electronics, Computing and Communication Technologies (CONECCT-2018), Bangalore 2018

WORK EXPERIENCE

Summer MAY 2018 - JULY 2018	Summer Internship at SAMSUNG R&D INSTITUTE Bangalore <i>Worked on ANDROID DYNAMIC CLASS LOADING, where we can open any other app module from a primary app without the secondary app being installed on the device. App modules run dynamically on the device.</i>
Winter December 2018	Winter Internship at FLUXGEN ENGINEERING TECHNOLOGIES PVT LTD Bangalore <i>Designed an ENERGY MONITORING BOARD, which tells us how much energy a house is consuming at a given instance. These readings is sent to cloud where machine learning algorithms are used to determine which appliances have been turned on at that moment.</i>
Winter DECEMBER 2017	Research Internship at INDIAN INSTITUTE OF SCIENCE Bangalore SUPERVISOR: PROF. SK NANDY, DEPARTMENT OF CDS, IISc <i>Worked on ReneGENE-DP (Dynamic Programming), parallelised SMITH WATERMAN ALGORITHM on GPU using CUDA and openCL (Parallel computing platforms) and integrated with ReneGENE Pipeline.</i>
Summer MAY 2017 - JULY 2017	Research Internship at INDIAN INSTITUTE OF SCIENCE Bangalore SUPERVISOR: PROF. SK NANDY, DEPARTMENT OF CDS, IISc <i>Developed ReneGENE-VC, an accurate Variant Calling Software, for genomic big data analysis pipeline. Came up with a statistical variant data comparison pipeline from multiple variant calling tools.</i>

EDUCATION

2015 ONWARDS	Bachelor of Technology in ELECTRONICS AND COMMUNICATION ENGINEERING National Institute of Technology Karnataka (NITK) , Surathkal CGPA: 8.06
MAY 2015	Senior Secondary School, KARNATAKA STATE BOARD PERCENTAGE: 92.6%
MAY 2013	Secondary School, Indian Certificate of Secondary Education (ICSE) PERCENTAGE: 93.67%

PROJECTS

<i>Perforator Evaluation using Ultra Sound Doppler JUL 2018 - PRESENT</i>	<p>Sound Processing</p> <p><i>A perforator is blood vessel connecting deep and superficial venous system. We are trying to evaluate the velocity of blood inside perforator, depth from skin it is situated and diameter of perforator.</i></p>
<i>VLSI CAD Physical Design JAN 2019 - PRESENT</i>	<p>VLSI Design Automation</p> <p><i>Implemented VLSI physical design algorithms for Partitioning, Floor Planning, Placements using python.</i></p>
<i>Battery Charger JAN 2018 - MAR 2018</i>	<p>Analog System Design</p> <p><i>Designed a foldback power supply current limiting battery charger. When the load attempts to draw overcurrent from the supply, foldback reduces both the output voltage and current to well below the normal operating limits. Under a short circuit, where the output voltage has reduced to zero, the current is typically limited to a small fraction of the maximum current.</i></p>
<i>Moisture content of Cashew MAR 2017 - AUG 2017</i>	<p>Analog System Design, DEPARTMENT R&D PROJECT NITK SUPERVISOR: Prof.U Shripathi Acharya, HoD, Department of ECE,NITK Dr. T Laxminidhi, Department of ECE, NITK</p> <p><i>Moisture is a dielectric material therefore Capacitance method is used to determine the amount of moisture content in cashew. A circuit was designed such that change in capacitance is linear with increase in moisture. This linear change in capacitance was directly proportional to percentage of water present in Cashew.</i></p>
<i>Real Time Moving Object Detection AUG 2017 - NOV 2017</i>	<p>Digital System Design</p> <p><i>Implemented a real time moving object detection algorithm on fpga. We used background subtraction method where we used static camera for capturing video and first frame of video is directly consider as reference background frame and this reference background frame is subtract from current frame to detect moving object.</i></p>

ACHIEVEMENTS

- All INDIA General knowledge exam 12th rank. (2012).
- 3rd place in 800m state level athletics.
- Recipient of the Best Student award in high school, 2011
- Best paper award (IEEE PAPER).
- SAMSUNG Appathon Runner up.

POSITIONS OF RESPONSIBILITY

- Executive member of IE, NITK
- Chief Coordinator for INCIDENT 2019 (Student organized cultural fest of NITK)
- Joint convenor for corporate Hospitality in INCIDENT 2018
- Class representative at college (NITK) (2016 - Present)

