

Amarjeet Saini

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EDUCATION

- **Army Institute of Technology** Pune, India
Bachelor of Engineering in Electronics and Telecommunication(ECE); GPA: (8.99/10.0) Aug. 2016 – July. 2020
- **KV Minambakkam** Chennai, India
Secondary Education(10+2); Grade : 92% Aug. 2015 – July. 2016

RESEARCH EXPERIENCE

- **IIT Dharwad** Dharwad, India
Junior Research Fellow; Supervisor: Dr. Gayathri Ananthanarayanan and Dr. Rijurekha Sen Dec 2021 - Present
 - **Abstract:** Worked on performance and optimizations of Deep Neural Networks(DNNs) for heterogeneous hardware systems
- **IIT Guwahati** Guwahati, India
Research Intern; Supervisor: Dr. Gaurav Trivedi May 2019 - July 2019
 - **Abstract:** Worked on designing a hybrid power-based micro grid and ran simulations to study its dynamic behavior by performing fault analysis on nodes.
 - Tool:** PSCAD

PUBLICATIONS

PredAuditor: A Quantitative Audit of DNN Compilers for Real Time Systems on Edge GPUs, Omais Shafi, Khalid Pandit, **Amarjeet Saini**, Gayathri Ananthanarayanan, Rijurekha Sen, *Under Submission*

PROJECTS

- **RFID based Inventory Management System:**
As a part of my undergraduate thesis, built a inventory system for lab in which passive RFID tags were placed on every product (i.e., CPU, monitor, etc). Fixed RFID readers were placed on the doors of the labs. When a valid object passed through the doorway count was updated to Google Firebase, if it was a restricted object, an alarm was raised
Tools: C, Raspberry pi, sensors, Google firebase
- **OSH shell:**
Implemented a Unix shell which supports basic linux commands, pipes, output redirection to a file. Also, have added some extra commands i.e history, exit
Tools: C, Unix api
- **Hack assembler:**
Built a Hack Assembler as a mini-project that converts Hack assembly language to machine code of 16-bit value. It handles comments, white-space characters, and both A-type C-type instruction of Hack language
Tools : Python

COURSES

Digital Logic Design, Computer Architecture, Deep Learning(padhai), TinyML(edx)

ACHIEVEMENTS

- **GATE CSE 2021** AIR 13862 out of 1,50,000
- **National Level Creative Aptitude Test (NCAT) - 2019** scored 95.9 percentile.
- **AGIF Scholarship 2017** - based on Academic performance for top 5 in ECE department
- **Autocad Winner** at College Fest (2017)

SKILLS

- **Languages:** Python, C, C++
- **Edge AI Embedded boards:** Intel Movidus, Google Coral TPU, Rockchip NPU, Nvidia Jetson family
- **Tools & Libraries:** Openvino, Pytorch, OpenCV, Bash scripting

REFERENCES

Available on request