Anmol Gupta

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EDUCATION

Boston University
Boston, MA
MS with Thesis
Computer Engineering
Graduation Sept 2017
GPA: 3.73

Mumbai University
Mumbai, India
BE
Electronics Engineering
Graduated - May 2015
GPA: 3.72

COURSEWORK

- Computer Architecture
- Digital VLSI
- Verilog and FPGA
- Multi-core CPUs & GPUs
- Embedded Systems
- Operating Systems
- Cybersecurity
- Machine Learning

HARDWARE

- RISCV
- Intel x86
- ARM
- MIPS

SOFTWARE

Proficient	Mid	Familiar
C/Cpp	Matlab	MySQL
Assembly	Cuda	Perl
Verilog	OpenMP	HTML
Python	OpenCL	
Bash	JAVA	
SystemVerilog	LaTeX	

TOOLS

Cadence Virtuoso	Git
Scikit-learn	PyMTL
Xilinx ISE/Vivado	QEMU

TEACHING ASSISTANT

- Digital VLSI Circuit Design
- Introduction to Electronics
- Computer Architecture

EXPERIENCE

Analog Devices | Hardware/Firmware Design Intern
3550 N 1st St, San Jose, CA| June-17 to August-17

- Working in Analog Garage, an incubation group of ADI. Develop and integrating an accelerator for encryption on data on ADuCM3029 chip.

Integrated Circuits & Systems Group | Research Assistant
Boston University, Boston, MA | May-16 to Present

- Working with Prof. Ajay Joshi and Prof Manuel Egele on design and development of hardware-based Security

Siemens, Ltd. | PLC Design Intern
Mumbai, India | June-13 to July-13

- Design and Programming of injection modules on S7200 and S7300 PLCs at the Contactors and Relays Manufacturing Unit

MS THESIS

Malware Detection using HPCs | May-16 – Present

- Examine the use of Hardware Performance Counters (HPCs) with supervised machine learning techniques for malware detection
- Goal is to prove that it is not possible to classify high-level behavior of a program (whether it is malware or not) using the profiles from HPCs

PROJECTS

Security Assessment of Bitcoin | December 2016

- As a security assessment for the cybersecurity course, highlighted the various attack surfaces that are exploited by Wallet Vulnerabilities, Time Jacking and Transaction Malleability (vulnerability exploited in the famous Mt. Gox attack)

Mini OS on bare-metal | April 2016

- Implemented a basic operating system (OS) on bare-metal
- The OS booted from a GNU-GRUB2 Multiboot Loader, loaded a file-system on the RAM and used a FIFO scheduler to schedule processes

Rush Hour | December 2015

- Interfaced a keyboard and a HDMI display monitor to Nexys-3 (based on Xilinx Spartan-6 LX16 FPGA) board to make a video game. Link

4-AXIS SCARA BOT | May 2015

- For Senior Design project build a SCARA bot is rigid in all but Z direction.
- It had a complex mechanical design with load capabilities up to 10 kg (22 lbs) and the motors were programmed to rotate at 0.1 radians precision

AWARDS AND EXTRA-CURRICULAR

2014	1st Position in Prakalpa-14 (national level project exhibition) for the project 'Securing Home Automation using Dropbox'
2012-2015	Technical Head and Member of IEEE-KJSCE Student Chapter