Sachin Boban

Curriculum Vitae

Education

2018-current Master of Science in Computer Science, University of Utah, Utah, .

Graduate Student at School of Computing

2009–2013 Bachelor of Technology in Computer Science, National Institute of Technology,

Calicut, GPA - 9.08/10.

First Class with Distinction

Experience

Teaching

May 2019 - **Graduate Teaching Assistant**, School of Computing, University of Utah, Present Utah.

Graduate Teaching Assistant for Master of Software Developement (MSD) course in Database Systems.

Jan 2019 - Graduate Teaching Assistant, School of Computing, University of Utah,

April 2019 Utah.

Graduate Teaching Assistant for the undergraduate course in Computer Systems.

Professional

Dec 2015 - Software Development Engineer, Broadcom Limited, Bangalore.

June 2018 Part of the Automotive team that develops Automotive grade chip-sets based on BroadR-Reach Ethernet.

My Work included:

- Established documentation and review process, ensuring all documents are reviewed and in sync at every point of time.
- \circ Design and development of UART based Shell/Console with support for command history and shortcut keys, with custom print functions to keep stack usage restricted to 128KB.
- Memory protection using ARM MPU.
- Design and development of drivers for Analog-to-Digital Converter(ADC), Watchdog (based on ARM SP805), Audio-Video Time-stamping etc.
- Development of Atomic APIs based on ARM LDREX and STREX instructions.

Jul 2013 – Engineer - Software Development, Broadcom Communication Tech. Pvt. Aug 2014 Ltd, Bangalore.

- Worked in Camera and Memory Management for Android in Mobile Platform Solutions group.
- Worked in the development and maintenance of unit testing and associated debugging for NAS team under LTE modem.

May 2012 - Summer Research Fellowship, Indian Institute of Science, Bangalore.

Jun 2012 Worked on DRAM simulations towards understanding the various factors contributing to performance.

Projects

DRAM Performance Evaluation, *Under Prof. R Govindarajan*, Indian Institute of Science, Bangalore.

Worked towards understanding the various factors affecting DRAM performance and their effects using DRAMSim2.

Virtual Machine Security, *Under Dr. Priya Chandran*, National Institute of Technology, Calicut.

A study on the existing security issues associated with the roll-backing mechanism in Virtual Machines and exploration of possible solutions.

Malware Classification.

Worked towards detecting a malware by classifying it into a malware family using Kernel Object Behavioral Graph Clustering. The project gave us an hands-on experience on the basic ways of detecting and identifying a malware.

Programming

Basic python, XML, Shell (scripting), Plait

Intermediate C

Volunteering

Aug 2012— **Student Coordinator**, *PRISM (Promoting regional schools to international stan-* May 2013 dards through multiple interventions).

Kerala government project to raise government schools to international standards, where we helped school students towards improving their academic standards.

Jul 2011- Marketing Manager, Tathva'10.

May 2012 Worked towards securing sponsorship deals for the annual technical fest of National Institute of Technology, Calicut, India.