

# Sachin Boban

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in /sachinboban  
/sachinboban  
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## Education

### University of Utah

MS Computer Science

2018 – Present

Salt Lake City, UT

### National Institute of Technology, Calicut

BTech Computer Science

2009 – 2013

Calicut, India

## Programming

**Languages** C (over 5 years of professional development experience), assembly (ARM and x86\_64), C++, Python, JavaScript, ReactJS

**Tools/Platforms** GDB, UNIX/LINUX, x86\_64, ARM (Cortex-M7)

## Experience

### Broadcom Limited

Software Development Engineer

Dec. 2015 – Jun. 2018

Bangalore, India

- > Designed and developed **device drivers** such as ADC, Watchdog, UART etc., with a simple interface for the framework layer
- > Designed and developed a custom **shell** with support for built-in commands, command history and shortcut keys, **providing a simple and robust interface for unit and system testing**, with stack usage limited to 128KB.
- > Established the documentation and its review process for the entire team, which **ensuring all documents are reviewed and synchronized with the code** at all times.

### Broadcom Communication Tech. Pvt. Ltd

Engineer - Software Development

Jul. 2013 – Aug. 2014

Bangalore, India

- > Developed and maintained a */proc* file interface for reporting memory usage for Android 4.4.2, **paving the way for a better memory management** at the Mobile Platform Solutions group.
- > Developed and maintained unit testing, which **identified and aided in debugging numerous bugs** for NAS team under LTE modem

## Projects

### Buggy

/buggy

- > An Arduino based gesture controlled robot, with wireless (RF) controls.

### Timer App

/timer-app

- > A simple web based count down timer built using ReactJS.

### FIFA20 Dashboard

/fifa20-dashboard

- > A visualization project based on FIFA20 player ratings to visualize and compare the skills of soccer players.

### DRAM Performance Evaluation

- > A study undertaken towards understanding various factors affecting DRAM performance and their effects using [DRAMSim2](#), while working as intern under Prof. R Govindarajan, Indian Institute of Science, Bangalore.

### Virtual Machine Security

- > A [study](#) on the existing security issues associated with the roll-backing mechanism in Virtual Machines and exploration of possible solutions.

### Malware Classification

/malware-classifier

- > A security project 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.