Madushan Nishantha

Curriculum Vitae

Contact Info

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About Me

I'm a technology enthusiasts who always seeks for new and interesting technological advancements in Computer Science and Engineering which lets me to get in touch with new technologies as soon as they are available.

I love working with teams of other people and I can always adapt to the surrounding environment at ease.

My career goal is to work in the cyber security sector which I think will take the best out of me. I also have experiences in Mobile and Computer software development.

Education

2011–Now **Bachelor of Engineering (B.Sc.)**, *University of Peradeniya*.
Computer Engineering, Undergraduate

2002–2010 **High School**, *Sivali Central Collage*, Ratnapura.
Specialized in Science (Mathematics)

Awards

2011 Winner(Robotics – Mindstrom) – Innovators
Faculty of Engineering – University of Peradeniya

2013 1st runner up – ACES Hackathon
Faculty of Engineering – University of Peradeniya

2010 Bronze Medal – Sri Lankan Physics Olympiad

Internships

10/2014–03/2015 Short term technical training at Atrenta Lanka (PVT) LTD – Software Engineering Intern

Technical skills

Advanced
UNIX, Microsoft Windows, Android, FirefoxOS

Version Controlling (git, cvs, svn, Mercurial)

Cloud infrastructures (OpenShift PAAS, IBM SmartCloud, Google AppEngine)

Software Defined Networking

Intermediate
Raspberry Pi, Arduino, FPGA

FreeBSD, Ubuntu Touch, Jolla Sailfish

LaTeX, MS Office

Programming skills

Advanced
C/C++, Qt, Java, JavaME, Python, MATLAB, VHDL, Verilog, Shell

Intermediate
Haskell, Common Lisp, Node.js, Meteor.js, Antlr, Android, MySql, Perl, Ruby, BrainF, ARM, MIPS, x86 Assembly

Languages

Sinhala	**Mothertongue**	*Creative Writing*
English	**Intermediate**	*Conversationally fluent*

Interests

- Operating Systems
- Virtualization
- Hiking
- Reading

- Embedded Designing
- Quantum Computing
- Exploration
- Creative Writing

Projects

Android Custom Rom

Building a custom JellyBean Android version for HTC Desire HD mobile phone from Android Open Source Project, selecting and modifying different components of android internals to support legacy hardware and debugging them, learning how to use the android build system, android source management and Linux internals in the process.

Porting FirefoxOS (B2G) to a new hardware platform

Porting FirefoxOS, Boot to Gecko (B2G), to HTC Desire HD smartphone platform, hacking on B2G sources with the knowledge gained from previous Android Custom Rom experiences.

User level thread library – C

Designing and implementing of context switching library for user level C programs, exploiting the knowledge of synchronization, process scheduling, x86 hardware architecture, assembly and C calling conventions for x86.

Virtual Memory Management System – OS161

Designing and implementing a Virtual Memory Management System for educational operating system OS161 making use of the knowledge about basic virtual memory concepts such as paging, swapping, knowledge about synchronization and how the physical memory works.

Contributing to Firefox for Android – fenek

Fixing the bug ID 948896 on Mozilla Bugzilla which is committed to the mozillla-central source tree as rev 2cc946bb55c4

Seven Segment Display Decoder for hexadecimal numbers – FPGA

Designing and implementing a decoder for displaying hexadecimal numbers in seven segment displays on Altera DE2 FPGA development board using VHDL.

4bit ALU – FPGA

Designing and implementing a 4bit ALU on Altera DE2 development board using VHDL.

OCR based chemical reaction solver – Android

An android application which uses Google's tesseract OCR engine to identify chemical reactions printed on paper and return the reaction result.

Tag Cloud Generator – C

UNIX based HTML Tag Cloud generator which takes advantage of UNIX multiprocessing architecture to speed up the processing of a large number of HTML files concurrently.

Automated Timetable – Android

Automated android timetable which synchronize across multiple people and devices with the help of the Google calender API and PhoneGap to keep in track with academic timetable changes and updates and notices.

Singlish for Mobile – JavaME

Singlish to Unicode Sinhala converter for low end JavaME compatible mobile phones.

Referees

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