SOOHAM RAFIZ

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% github.com/sooham

EXPERIENCE

IP Development Engineering Intern

@ Intel Corporation

Intel holds market dominance on desktop class microprocessor sales.

- Migrated Intel's deep-learning accelerator framework, OpenVINO, across backwards-incompatible updates to developer environment and infrastructure. This task required cross-functional coordination with my team, sysadmins, and hardware engineers.
- Reduced OpenVINO Quartus build time for extremely large CNN (i.e ResNets, VGG) models by 30% for smoke tests and weekly regression tests. This alleviated the number of engineers waiting overnight for build completion.
- Developer for LDPC 5G codec IP compatible with 3rd Generation Partnership Project (3GPP) standard of 5G cellular communications for clients such as Huawei.
- Added Cyclone FPGA support to Quartus' digital signal processing (DSP) portfolio of hardware IP.
- Migrated DSP legacy synthesis, placement-routing, and verification tests to new testing framework.
- Technical editor and reviewer for "Intel Quartus User Guides" of above software; provided clients factual and legitimate documentation.

Avionics Engineer

University of Toronto Aerospace Team, Rocketry Division

Developed software for reading flight-critical sensors using Arduino, ICs, and digital filters.

Web Development Intern

Careerleaf Inc.

Careerleaf provides job posting boards (a la Indeed) as a service.

- Developed and deployed a job management module using AngularJS.
- Improved site reliability by writing unit tests.
- Liaised with development team and product manager to fulfill client requests regarding UI, backend, and job analytics.
- Authored Quality Assurance tests for single-sign-on (SSO) functionality.

EDUCATION

B.Sc in Computer Science

University of Toronto

08/2014 - Ongoing

 C.L Burton Open Scholarship recipient (award is competitive) GPA

3.14 / 4.00

PROJECTS

Inpainting

Authored the first open-source implementation of Criminisi et al's inpainting algorithm.

Personal Blog

A personal website and blog built using React.js, node.js and webpack.

MapReduce Engine

A simple Map Reduce engine in C demonstrating MIMD parallel computing.

Machine Learning Projects

I have authored some machine learning projects focused on image-to-image translation and adversarial example generation. See my Github page on the subheader of this resume.

TECH. SKILLS

HTML, Javascript, Django, Tornado, Express, Node.js, React.js, Google Cloud.

C, C++, Java, Python, Perl, Shellscript

Tensorflow, Caffe, PGMs, Neural Networks Quartus, Verilog, VLSI, Tcl

Data Structures. Version Control, Linux