Russell Bryan

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Contact Information
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Objective

Seeking internship allowing me to gain experience in the fields of mathematics and computer science.

Education

Arkansas School for Mathematics, Sciences and the Arts, Hot Springs, AR 6/2014
Concentrations in Physics, Mathematics, and Computer Science

University of Oklahoma, Norman, OK 9/2014 - Present
Pursuing an undergraduate degree in Mathematics GPA 3.68 overall

Experience

Software Engineering Intern, National Instruments,
Austin, TX Summer 2015, 2016

- Wrote driver features making a product more suitable for use in physics experimentation at a major national laboratory
- Currently implementing new driver features for SMUs.

Student Research, FPGA Based Detection of Coincident Photons,
University of Oklahoma Fall 2014 - Spring 2015

- Wrote VHDL that doubled the number of channels on an existing detection circuit design

Student Research, Brownian Motion as a Source of Entropy for the Generation of Random Numbers, ASMSA Fall 2013 - Spring 2014

- Wrote C program to track particles of milkfat suspended in water and tested data gathered as a source of entropy

Personal Projects

Vole Lisp: Language written from scratch in Java. Spring 2016

- Wrote a simple interpreted LISP 1 with first class functions, tail-call optimization, bignums, and basic macros.

Bitcoin Solver: Using a SAT solver to solve Bitcoin Ongoing

- Currently writing a program in scheme that attempts to translate the Bitcoin proof of work function into a boolean equation

RPL Programming Language: a simple programming language. Fall 2015

- Wrote a stack based reverse polish lisp in C.

Academic Honors

Intel Science and Engineering Fair Finalist 2014
Association for Computing Machinery 4th Place Award ISEF 2014
Yale Science and Engineering Association Science Fair Award 2013
National Merit Finalist

Skills

Programming Languages:	C/C++, Bash, Scheme (Lisp), Java, Python, Perl, R
Software:	GNU Bison (Yacc), Flex (Lex), Linux/Unix, Windows, GNU Toolchain and build process, Git, Perforce, Labview