

Brian Kelley

Education

Purdue University

BS Computer Engineering
West Lafayette, Indiana
Est. Graduation: Spring 2013
Senior, GPA: 3.43

Selected Coursework:

Digital Systems Senior Design
ASIC Fabrication
Computer Architecture
ASIC Design Laboratory
Microprocessor Systems
Digital Systems Design
Data Structures
Advanced C Programming
Compilers
Operating Systems

Detailed Experience With:

System Verilog, VHDL,
OVM, ModelSim, Verdi,
C (Desktop and Embedded),
Perl, C++, Java, C#, Python,
OrCAD Capture/Layout,
MIPS/Freescale Assembly,
Linux, Version Control
Systems, MS Office

Contact Information

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Apt. 117
Folsom, CA, 95630

Permanent Mailing Address:

645 Ellsworth St.
Indianapolis, IN, 46202

Portfolio



Project Videos & Details:
www.realm.com/portfolio

Senior computer engineer seeking a career where I can contribute to an extraordinary semiconductor product using my digital hardware design or pre-silicon validation skills starting in June 2013.

Professional Experience

Intel Corporation, Folsom, CA (Summer 2012 – Winter 2012)

Pre-Silicon Validation, Atom Smartphone SoC R&D

Verifying and debugging the multimedia blocks and streamlining the regression process.

- Verifying the multimedia blocks by running tests and debugging failures.
- Fixing validation bugs bypassed by the previous project.
- Implementing the framework that will lead to fully automated regressions.
- Improving regression process to double functional coverage.

National Instruments, Austin, TX (Summer 2011)

Driver Development Intern, High-Speed Digital I/O R&D

Researched, designed, and tested new features for a data acquisition device driver.

- Wrote specifications for new features based on customer requests.
- Developed code for driver support of a new product's features.
- Wrote and executed a thorough automated test plan.
- Worked with other engineers to debug problems in time for a product launch.
- Found a hardware bug that was able to be fixed before units were shipped to customers.

Activities

Purdue Solar Racing (Fall 2008-present)

Lead Programmer/Electrical Team Member

Responsible for designing, assembling, programming, and troubleshooting a solar car's electrical and computer systems.

- Creating a Perl script to reduce software development time by 30%.
- Designed a microcontroller networking firmware library based on CAN.
- Designed circuit boards responsible for telemetry and battery protection utilizing Microchip microcontrollers.
- Attended public outreach events to promote science and engineering.

Purdue Solar Racing (Fall 2011)

Electrical Team Director

Responsible for project management of all electrical systems for an electric vehicle.

- Led a team of eight engineers in designing and implementing the systems of an electric vehicle.
- Created partnerships with companies that led to \$10,000 in donations.
- Conducted hardware and software design reviews.

School Projects

ASIC Fabrication (Spring 2012)

Lead chip design of an ARM-based microcontroller/graphics SoC.

Digital Systems Senior Design (Spring 2012)

Designed and programmed a user-friendly touchscreen driver display for a solar car.

Computer Architecture & FPGA Prototyping (Fall 2011)

Designed a dual-core, pipelined, MIPS-based processor with cache for an Altera FPGA.

ASIC Design Laboratory (Spring 2011)

Designed an oscilloscope chip with a signal processor and graphical output.