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Kashev Dalmia

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Expected Graduation - May 2016

August 2014 - Present

(63

Work

SKILLS

(630)927-0027

EDUCATION University of Illinois at Urbana-Champaign

M.S. Electrical and Computer Engineering

- Cumulative GPA 3.75/4.00
- Research Assistant in the UIUC Embedded Systems Lab under Professor Tarek Abdelzaher.
- Developing system models & control algorithms for server allocation to minimize energy usage.

University of Illinois at Urbana-Champaign

August 2010 – May 2014

B.S. Electrical Engineering, Minor in Computer Science with Honors

• Cumulative GPA – **3.58/4.00**

Technical GPA – 3.82/4.00

• James Scholar

- Relevant Coursework
- Computer Systems Engineering
- Real Time & Embedded Systems
- Computer Organization & Design
- Distributed SystemsEmbedded DSP
- Communication Networks

May 2014 – August 2014, May 2015 – August 2015

Flight Software Intern – Falcon Team

Space Exploration Technologies, Hawthorne, CA
Designed and shipped a new test architecture for navigation software components, focusing on ease of use.

- Enabled more modular configuration of vehicle events, saving hours of engineering verification.
- Developed a custom static analysis toolchain to aid in assurance of the safety of flight computer memory usage.

LabVIEW Student Ambassador for UIUC

National Instruments, from Urbana IL

August 2013 - May 2014

[spacex.com]

[ni.com/academic/ambassadors]

• Taught LabVIEW Core I & II to UIUC Students for of CLAD certification. Promoted LabVIEW use among the university population.

RF R&D Software Engineer – Internship

National Instruments, Austin TX

May 2013 – August 2013

[<u>ni.com</u>] and usage examples for the NI

- Designed, developed, tested, and documented customer facing Slot Power measurement FPGA IP and usage examples for the NI PXIe-5644R/45R Vector Signal Transceiver using LabVIEW and LabVIEW FPGA.
- Improved test times down to near real-time performance (sub 50ms overhead).

Software Developer for LTE Testing Tools — Co-Op

Alcatel-Lucent, Naperville IL

May 2012 – May 2013

[alcatel-lucent.com]

- Designed & developed a new, comprehensive testing suite tool to automate LTE Network Tests & create Network Health Reports.
- Certified LabVIEW Developer; Experience working on FPGA based DAQ Applications.

• Proficient in C++, C, Python, Arduino & Variants, JavaScript, VHDL, MySQL, x86 Assembly.

• Experience in Object Oriented Design, Embedded Programming, Java for Android Apps, & Full Stack Web Programming.

PROJECTS WizardStaff [kashev.github.io/wizardstaff]

Spring 2015

- Worked on a 4 person team to create an IOT party game for HackIllinois, which had sensor-enabled, LED-equipped, WiFi connected glassware interacting with an Android app, & web and Pebble watch-app scoreboards.
- Won best use of Spark Core Microcontroller, & featured on popular blog Hack A Day.

Pipelined LC3-BX Processor Model

Spring 2014

- Worked on a 3 person team to design, build and test a classic RISC 5 stage pipelined LC3-B Processor model in VHDL with a two level cache, an extended LC3-X ISA, a Branch Target Buffer, performance counters, and a sophisticated auto-test system.
- Won 2nd Place in the project design competition, scored on performance of matrix multiplication code.

nextWAVE [kashev.github.io/nextWAVE]

Spring 2014

- Worked on a 4 person team to create a 'smart microwave' prototype for HackIllinois, which crowd-sourced cook times via barcode scanned by Android app, was controllable via WiFi, and had an accompanying Pebble smart-watch app.
- Featured on Hack A Day, Firebase & OctoPart company blogs, & got 13K views on our demo on YouTube.

Muxxy – A HiFi Audio Switch

Fall 2013

- Led a 3 person team to design, build, and test a high fidelity, Bluetooth capable, remote controlled audio switch.
- Worked on the Energia embedded C++ for user hardware input & I²C communication, an Android IR app on the HTC One (m7) for remote control, & LabVIEW myDAQ Code to automate testing of frequency response along analog signal path.

Wireless Neural Prosthesis Control

Spring 2013

- Worked as embedded software developer with BMES to interface with a neural headset to wirelessly control a prosthetic arm.
- Won 1st Place at UIUC EOH in Theme Category: Imagine the Impossible.

Websites, a PGA2310 Arduino Library, Tetris Attack, EOH Projects, dotfiles, and more...

[github.com/kashev]

OTHER HKN Director of Initiate Affairs

Fall 2012 - Spring 2014

Organized service and social events to build community among initiate class.

• 100 % Initiate class growth in Spring 2013, 100 % Graduate Student Initiate class growth in Fall 2013

Eagle Scout [scouting.org] [troop98.org]

June 2010