Home 1048 Hyannis Circle Carol Stream, IL 60188

# Kashev Dalmia

Campus 904 W. Stoughton St. #7 Urbana, IL 61801

<u>~</u>@

kashev.dalmia@gmail.com

August 2010 - May 2014

**(** 

Work

(630)927-0027

### EDUCATION University of Illinois at Urbana-Champaign

#### M.S. Electrical and Computer Engineering

• Member of the UIUC Embedded Systems Lab under Professor Tarek Abdelzaher.

August 2014 – Present Expected Graduation – May 2016

#### University of Illinois at Urbana-Champaign

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

• Cumulative GPA - 3.58/4.00

Delever Commenced

- Technical GPA 3.82/4.00
- James Scholar

- Relevant Coursework
- Computer Systems Engineering
- Real Time & Embedded Systems
- Computer Organization & Design
- Embedded DSP

#### Communication Networks

[greendatacenters.web.engr.illinois.edu]

#### May 2014 – Present

• Distributed Systems

#### **Graduate Research Assistant**

#### Embedded Systems Group: Green Data Centers Project, Urbana IL

Refining the external usage API for a Green Data Center test bed funded by NSF.

• Developing system models & control algorithms to minimize energy consumption with non-constant work load.

## Flight Software Engineering Intern – Falcon Team

May 2014 – August 2014

Space Exploration Technologies, Hawthorne, CA

• Worked on several projects involving vehicle code and associated code bases with the goal of rapid & reliable launch.

• Designed and shipped a new test architecture for navigation software components, saving future engineering time.

#### LabVIEW Student Ambassador for UIUC

#### National Instruments, from Urbana IL

August 2013 – May 2014

[ni.com/academic/ambassadors]

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

## ${\sf RF\ R\&D\ Software\ Engineer-Internship}$

#### National Instruments, Austin TX

May 2013 – August 2013

[ni.com]

[spacex.com]

- 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 assist ALU LTE Test Engineers by automating LTE Network Tests and creating Network Health Reports.
- Skills
- Proficient in C++, C, Python, Arduino & Variants, JavaScript, VHDL, MySQL, x86 Assembly.
- Certified LabVIEW Developer; Experience working on FPGA based DAQ Applications.
- Experience in Object Oriented Design, Embedded Programming, Java for Android Apps, & Full Stack Web Programming.

## PROJECTS 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 2<sup>nd</sup> 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 popular blog 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 & I<sup>2</sup>C 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.

#### dotfiles, EOH Projects, a PGA2310 Arduino Library, Tetris Attack, 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

Bassist, Vocalist, & Equipment Manager for Illini Contraband

Fall 2010 - Present