

EDUCATION

University of Illinois at Urbana – Champaign

August 2013 - Present

Pursuing B.S. in Computer Science; Expected Graduation in 2017

CS Classes : Completed – Data Structures, Discrete Structures, System Programming

In Progress – Computer Architecture, Algorithms & Models of Computation, Virtual Reality, Programming Studio

Awarded **Engineering Deans List** – Spring 2014, Fall 2013

Awarded **Engineering James Scholar** - Since start of Freshman Year

EXPERIENCE

CS 196 Course Staff **Department of Computer Science, University of Illinois**

Fall 2014 - Present

Member of Executive Course Staff and Head of Corporate Committee

This course is the Honors Section for Introduction to Computer Science and is run by Computer Science Students.

- Member of a team that is mentoring over 160 new Computer Science students.
- Mentoring freshmen on projects involving Natural Language Processing, Artificial Intelligence, and Computer Vision.
- Directing new members in Course Staff through their first semester of teaching.
- Conducting micro-lectures on Data Structures and Programming Principles.
- Designing and Planning course content and materials.
- Responsible for corporate outreach for funding this course, and creating awareness about this course.

Software Developer Intern **HSBC Mumbai**

Summer 2012

Intern with IT and Trading at HSBC Securities and Capital Markets (India) Pvt. Ltd.

- Redesigned the algorithm and process by which a customer's trading request is handled.
- The new algorithm facilitates a 90% improvement in the response time for requests.
- Automated a number of daily functions that were previously performed manually.
- Added Futures & Options functionality to programs which previously only processed Equities.

Front End Web Developer **ATLAS, University of Illinois**

Fall 2013

ATLAS (Applied Technologies for learning in the Arts and Sciences) manages IT for the College of Liberal Arts and Sciences

- Assisted in designing and development of websites for new academic programs at the university.
- Performed maintenance on and helped update several live sites.
- Maintained communication with the clients of websites that were assigned to me.

ACTIVE PROJECTS

Left 4 Virtual Reality – (MHacks V: Top 10) Immersive **Virtual Reality** controllers for First Person Shooter games. Largely a hardware project using a **Raspberry Pi** along with a number of sensors to translate physical actions into in-game actions.

World Chat – (WildHacks: IBM API Prize) **Android**, **iOS**, and **Web** apps (using **node.js**, **react.js**) that translate messages into a user's native language. For example, to enable a user who only speaks language A can chat with another user that speaks only language B by translating in the background.

241Beats – Android app built using the **Android NDK** that synchronizes music playback across multiple connected devices.

Cellular Lock – (Boilermake: Twilio API Prize) Basic **Distributed system** using **SMS** to communicate between nodes.

Last layer – An **n - factor authentication** scheme for RFID / proximity access locks. The program is built to run on a Raspberry Pi and is designed to fit into existing locks.

CAMPUS INVOLVEMENT

Reflections Projections (R|P) Mechmania

Spring 2015 - Present

Mechmania is a 24 hour AI coding competition hosted at R|P, an annual Computer Science Conference at UIUC

- Member of a team of 6 students responsible for developing and maintain the associated infrastructure.
- Developing of infrastructure using Python and various libraries (as yet to be decided).

Illini Hackers

Fall 2014 - Present

This is the umbrella RSO for hackathon related events. Illini Hackers stood first during the MLH Fall 2014 season.

- Notable personal achievements at Hackathons:
MHacks V (Sp15) – Top 10 Finalist | Boilermake (Fa14) – Twilio API Prize | WildHacks (Fa14) – IBM API Prize

Association of Computing Machinery at Illinois (ACM)

Fall 2014 - Present

The University of Illinois Chapter of the Association of Computing Machinery.

- Active member and participant in SIGART (Special Interest Group for Artificial Intelligence)

PROGRAMMING SKILLS

Comfortable with

C++ C Java Objective C Python Visual Basic JavaScript C#

Familiar With

Android NDK MySQL Ruby node.js Flask