

#### **EDUCATION**

## University of Illinois at Urbana-Champaign | Champaign, Il

Aug 2011- May 2015

- College of Engineering: Pursuing BS in Computer Science
- Overall GPA: 3.72/4.00; Technical GPA: 3.73/4.00
- Coursework: Data Structures (C++), Operating Systems Programming, Relational Database Systems, Computer Architecture

### **WORK EXPERIENCE**

### **Software Engineer at Huawei** | Python/PHP/Shell Scripts

May 2013 -Jul 2013

- Designed cloud computing network with LDAP authentication option and deployed it with OpenStack.
- Wrote python library for OpenStack's deploy VM, undeploy VM, SSH connection and noVNC capabilities.
- Created module to install one of twenty-two possible web apps onto a newly deployed VM (Git, Gerrit, etc...)
- Became technical leader for cloud module, aided China teams to adopt our module.

# **Software Development Intern at Scrollbee LLC** | PHP/SQL/CSS/HTML/jQuery

Aug 2011 - Dec 2011

- Optimized song searching algorithm to minimize result parsing computations.
- Implemented "broadcast song" module. Function was used by majority of Scrollbee users.
- Created template and search module for Scrollbee LLC's blog.

# **PROJECTS**

# UNIX Operating System with Preemption | C, x86 Assembly, ARM assembly

Jan 2013-Apr 2013

- Supports a filesystem and multiple terminals, with a subset of UNIX utilities defined (exec, halt, grep, cat, find)
- Partially ported to Raspberry Pi (ARM architecture). New bootloader, map permissions to x86's permissions.
- Won 1st place in UIUC's Operating System Design Competition.

#### Rogue in Siebel - NetHack Clone | C++

Jul 2013- Aug 2013

- Features automatic map creation, monster and item population, and special AI for different game entities.
- Implements persistent game sessions by compressing and serializing data to a save file, later restoring it.
- Can load monsters, items and AI modules created other people.

## Web App: Finding Prerequisite Knowledge for Learning Skills | PHP, Python, MySQL JavaScript

Mar 2013- Apr 2013

- Wrote a routing module to implement an MVC framework in PHP from scratch.
- Implemented a learning algorithm that finds prerequisite knowledge from parsing many PDF documents.
- Used Wikipedia to verify user content suggestions: by using Wikipedia's API and parsing with BeautifulSoup4

## Captcha Solving Algorithm for Zynga Games | Java/iMacroSL/SeleniumIDE

Jul 2011- Nov 2011

- Exploited hysteresis to achieve 70% accuracy in solving Zynga's human-verification puzzles
- Built extensive library of valid and rejected puzzle responses and efficient query system
- Intelligently generates puzzle answer from pixel sampling if library answer is not found

#### LEADERSHIP EXPERIENCE

### **TA for Operating Systems Programming (ECE391)** | Teaching Assistant

Aug 2013- Current

- Hold office hours to help students write their Operating System projects and assign grades during live demos.
- Write exam questions with course staff.

# **Engineering Ambassador Program** | Computer Science Representative

Jan 2013-Current

• Give presentations at local schools to foster excitement for computer science and engineering