

# Arshia Malkani

## EDUCATION

### **University of Illinois at Urbana-Champaign**

School of Engineering  
BS in Computer Science  
Expected Grad. May 2019  
Cum. GPA: 3.5

### **University of California at Berkeley**

Summer 2014 and 2015  
Cum. GPA: 3.7

## SKILLS

### **Proficient Languages:**

C++, Python, Java, HTML, CSS

### **Familiar Languages:**

Scheme, C Sharp, Javascript

## COURSEWORK

Intro to Cloud Computing  
Text Information Systems  
Computer Architecture  
Data Structure  
Discrete Mathematics  
Software Design  
Honors Intro to Computer Science  
Structure and Interpretation of  
Computer Programs

## ACTIVITIES

Association of Computing  
Machinery (ACM)  
SIG-IR (Information Retrieval)  
SIG-Pwny (Cyber Security)  
Women in Computing Machinery  
(WCS)

## CONTACT

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<https://github.com/CodeBrew28>

## EXPERIENCE

### **Yahoo: Fili**

Fall 2016

I worked on an open source project in which I built a grammar parsing tree for an API Filter.

## PROJECTS

### **Unblock Me Game solver**

Summer 2015

<https://github.com/CodeBrew28/blocks>

I implemented a solver that uses heuristics to choose a DFS or a BFS algorithm to rearrange puzzle pieces to bring a block to the exit. Solved all levels of difficulty in under 2 minutes.

### **Gitlet: Version control system**

Summer 2015

<https://github.com/CodeBrew28/gitlet>

I designed a version control system similar to github with commands such as commit, merge, and rebase to manage code repositories. Used a commit class and a graph structure that allows quick traversal using hash maps.

### **TopHat: Boilermake Hackathon 1st place**

Winter 2016

<https://github.com/warut-vijit/BoilerMake2k17.git>

I used nmap to gather IP addresses and TCP packets which are displayed as a 3D network in Virtual Reality. Used artificial intelligence agent to mimic a virus spreading so that the user has to shut down IP addresses to isolate the virus and protect the network.

### **NewsFeed**

Winter 2016

I implemented a website with Flask that scrapes CNN, NYT, BBC to create a database of articles, and then uses the TF-IDF algorithm to rank articles depending on the user's search.

### **Distributed Music System**

Fall 2016

I implemented a website with Django that allows users to query songs, add songs to a shared queue, and recommend songs using collaborative filtering.

### **VandyHacks: Vesta Stock Market Visualization**

Fall 2016

Implemented a website with Flask that allows users to query stocks and generates graphs to show the actual stock prices, sentiment analysis toward the stock, and the average industry stock prices.