Arshia Malkani

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⚲ github.com/CodeBrew28

EDUCATION

University of Illinois at Urbana-Champaign
School of Engineering
BS in Computer Science
Expected Grad. May 2020
Cum. GPA: 3.4

University of California at Berkeley
Summer 2014 and 2015
Cum. GPA: 3.7

SKILLS

Proficient Languages:
Scala, C++, Python, Java
Experienced With:
Spark, Hadoop, Vertx, Flask, SQL

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-AI (Artificial Intelligence)
Women in Computing Machinery (WCS)

EXPERIENCE

OpenGov: Big Data platform Internship   Summer 2017 Redwood City, CA
I designed and built a customized SQL-like query language to parse queries, generate an AST, and validate the syntax and logical types. It also transforms the query to understand custom functions and talk to different SQL engines such as Spark, Presto, Postgress, etc. This library was integrated into the view pipeline to query financial and non-financial reports.

Credit Card Fraud Detection With Spark Streamming: Research Spring 2017
We designed a pipeline to take in a stream of credit card fraud data and use machine learning algorithms such as decision trees, logistic regression, and SVMs to predict credit card fraud.

Alice: Open Source Research Project   Spring 2017
https://github.com/elc1798/alice
Alice is open source digital assistant for Linux and Mac, inspired by Cortana, Siri, Alexa, and Google Assistant. Uses Machine Learning (SVMs) to understand what was said and map it to commands. I worked on mac integration, the music and news related commands, and the trainer to correctly interpret the commands.

PROJECTS

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.

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, push, merge, and rebase to manage code repositories. Utilizing a graph structure and hash maps to store relevant data, I was able to quickly traverse through commits and maximize performance.