Jeffrey Chan

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EDUCATION

Binghamton University, State University of New York Expected 05/2017
Thomas J. Watson School of Engineering and Applied Science
Bachelor of Science in Computer Science
Cumulative GPA: 4.0/4.0 | Watson School Dean's Honors List: Fall 2015 - Fall 2016

SKILLS

Languages : Python, C++, C, JavaScript, Java, Ruby, x86 Assembler, IBM Assembler
Operating Systems : Windows, Linux, z/VM
Tools : Bash, Vim, Git, Cygwin, Travis CI, Visual Studio, Android Studio, Cloud9, Heroku, PostgreSQL
Other : Agile, Behavior-driven Development, Test-driven Development, Object-Oriented Programming

PROFESSIONAL EXPERIENCE

IBM Corporation at Poughkeepsie, NY

Firmware Engineer Starting 06/2017

System z LPAR Firmware Engineering Intern 05/2016 - 08/2016

- Developed a non-disruptive logging service for the LPAR Hypervisor to resolve space limitations and capture data in memory when a dump is unavailable, providing First Error Data Capture for the team.
- Organized meetings with global firmware teams and created the design document outlining the new interface for the logging service.
- Tested the new interface using a hand loop to issue a watchdog timeout and verified the results of the logging service by examining a virtual machines dump data.

System z FCP Firmware Development Intern 05/2015 - 08/2015

- Developed firmware for IBM customers to retrieve diagnostic parameters from the Fibre Channel fabric, enabling customers to undergo preventative maintenance.
- Created a command-line program using Jython to gather information about devices and members in the Fibre Channel fabric and catalog them into an Apache database, eliminating the need to manually update the database.
- Designed the layout of a new tool to login new virtual devices into the Fibre Channel fabric, allowing IBM customers to have more flexibility when communicating between two devices.

PROJECTS

Aura Project (Open Source MMORPG Server Emulator)

- Contributed to an open source community involved in reverse engineering an online multiplayer game.
- Implemented a shutdown command to notify users, save server variables, and switch channels to maintenance.
- Developed the shutdown procedure and inter-server communication in C#.

Binghamton University Table Tennis Club Website

- Built a web application that stores club attendance, practices, player info/ratings, displays photos, and more.
- Used Python/Django/PostgreSQL for backend logic to update the database and show the latest statistics.
- Utilized Git for collaboration among five members and Cloud9 IDE for pair programming.

Yut Nori for Android

- Designed the board game layout using XML and planned the flow of events in the game using class diagrams.
- Combined sequences of images using the AnimationDrawable class to create an interactive user interface.
- Published the app on the Google Play Store.

Bird Fetcher (Alexa Skill)

- Developed an Alexa skill for the Echo & Echo Dot allowing users to look up the 10 most recent bird sightings in a city.
- Incorporated the Google Maps API to get the latitude/longitude of a city and passed the coordinates to the eBird API.
- Published the skill on the Amazon Alexa Skill store.

Big Bowl (Web Application)

- Created a word party game that allows users to enter words into a word bank and play taboo, charades, and password.
- Used GET and POST requests using JavaScript/jQuery to provide a single page application for a simple user interface.
- Allowed users to create online rooms and contribute words together by using Heroku Postgres.

OTHER EXPERIENCE

Learning and Representation in Cognition Lab Assistant, Binghamton University 08/2016 - 05/2017