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EDUCATION

Master of Science, Computer Science

May 2020

State University of New York at Binghamton, Binghamton, New York Bachelor of Engineering, Electrical and Electronics Engineering

June 2015

People's Education Society University (PESU), Bangalore, Karnataka

RELEVANT COURSEWORK

Design Patterns Computer Architecture Operating Systems
Distributed Systems Computer Networks Computer Algorithms

PROFESSIONAL EXPERIENCE

Software Engineer, WIPRO Limited

October 2015 - June 2018

- Implemented rules to generate offenses and alerts when there are anomalies in the user systems.
- Performed risk analysis and vulnerability assessments to identify the vulnerabilities in the system.
- Experience with TCP/IP protocols and internet protocol (IP) addressing, OSI and TCP/IP models.
- Performed daily maintenance and monitoring of anti-malware, web proxies, host and network-based intrusion detection systems.
- Configure and support VMware for testing of malicious payloads carrying data destruction, offensive messages and the delivery of spam emails through the infected user's account.
- Knowledge Transfer to fellow junior employees about security awareness and procedures, mentoring them and reviewing their work.

COMPUTER SKILLS

Tools: RSA SA, QRADAR, Crowd Strike, JIRA, NetBeans.

Programming : JAVA(Advanced), Python (Intermediate), C (Intermediate), JavaScript, MySQL

Frameworks : Spring-MVC, Spring boot, Hibernate, JSP, REST, Django. **Operating Systems** : Windows Vista, Windows XP, Windows 7, Linux OS: Ubuntu.

SIGNIFICANT ACADEMIC PROJECTS

Cassandra data Store with Configurable Consistency, Developer (Python). August 2019 - December 2019

- Designed and developed a Cassandra like **Key-Value data store** using socket programming
- · Assigned Keys to replica servers using a partitioner like the ByteOrderedPartitioner in Cassandra
- Consistency level is configured by the client similar to Cassandra. When issuing a request (RPC calls) using protobuf, put or get,
- the client explicitly specifies the desired consistency level. Implemented Read repair and Hinted handoff consistency levels.

Distributed Hash Table, Developer (Python).

August 2019 - December 2019

- Designed and developed a distributed hash table using Apache Thrift for generating IDL
- Used SHA256 of the file names to hash the files to the nodes
- Designed client that issues remote procedure calls to the chord servers and verifies the correctness of the remote procedure calls supported by the server.

Chandy-Lamport global Snapshot Algorithm, Developer (Python). August 2019 – December 2019

- Designed **distributed banking application** with multiple branches, TCP connections are setup between all pairs of branches.
- The branch then randomly selects another destination branch and sends a random amount of money to this destination branch at unpredictable times and have used Chandy-Lamport global snapshot algorithm to take global snapshots of the bank.

Multi-Threaded HTTP Proxy with Caching (C programming).

August 2019 – December 2019

- Designed a multi-threaded HTTP Proxy, using socket programming in C, that accepts HTTP GET requests and relays the client's HTTP requests to the HTTP server and forwards the server's response back to the client.
- Implemented caching in the HTTP proxy which stores the past requests in its local storage and if an incoming request matches an entry in the cache, it returns its cached data to the client directly.

Serialization and De-Serialization using Reflection and Dynamic Proxy (Java).

Summer 2019

- Create object references of defined classes using **Reflection** and serialize them in XML format
- Convert data available in XML format to objects of defined classes and compare them to serialized
 objects to check for errors

Individual Project

Data Analytics and Visualization of Covid-19 (Python, JavaScript).

Spring 2020

- Designed a website with a dashboard displaying useful information regarding Covid-19 cases, statistics, graphs using Python, **Django Framework**, MySQL database, HTML, CSS and JavaScript.
- Imported Data (with over 1000000 rows) to a database and analyzed datasets to get the useful insights using Python and Django.
- Visualized gathered information in the form of lists, graphs, charts (Using chartJS) and maps (using leaflet JavaScript library).