ABDULLAH ALZAIDY

CONTACT

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doitmaan

EDUCATION

University of Western Ontario — Sept. 2015 to Current
B.E.Sc. Mechatronics Engineering 2020
B.Sc. Medical Physics 2020

Stanford University — Mar. 2019
Certificate Machine Learning 2019

SKILLS

HARDWARE: Arduino, Raspberry Pi,
Circuit board soldering, Multimeter, Signal Generator, Motorola 68HC11 Microcontroller, FPGA, Oscilloscope
SOFTWARE: C++, MATLAB, C, MATLAB Simulink, Python, Java, Linux(OS), SQL, Arm Assembly, JavaScript, Jmeter, ROS(Robot Operating System)
FRAMEWORKS & LIBRARIES: InfluxDB, Kafka, Docker, Graphite, Grafana, ElasticSearch, Redis, Kibana, Apache Kibana, CMake, OpenCV, PyQt, NumPy, SciPy, Matplotlib, Pandas, PyAutoGUI, Scikit-learn, Jupyter, Nginx, Jmeter, ROS, Selenium, Caffe
CAD SOFTWARE: SolidWorks,
MicroCap (Circuit Simulation), KICad (PCB Circuit Design), 123D design, CES (Material Selection), Quartus II, Eagle, Solidworks simulation

CERTIFICATES

Python for Data Science · IBM — Jan. 2019
See Credential:
https://www.youracclaim.com/badges/0684dfa6-f610-4fc5-b67e-a36002bae66c/linked_in_profile

Applied Data Science with Python - Level 2 · IBM — Jan. 2019
See Credential:
https://www.youracclaim.com/badges/20966090-3fd0-4845-a390-1178d0a702bc/public_url

Statistics 101 · IBM — Jan. 2019
See Credential:
https://www.youracclaim.com/badges/5bdfdc49-c3a6-49d0-b385-5b8cc1bfe1ac/public_url

Certified Associate - Mechanical Design (CSWA) · SolidWorks — Apr. 2017
CERTIFICATION ID:C-G9LSF744B3

EXPERIENCE

IBM — Markham, Ontario, Canada
Software Developer Intern (IBM Digital Commerce-Application Development Team) — Sept. 2018 to Current
• Developing automated functional verification test cases and maintained automated testing buckets that run on a daily continuous integration pipeline that points towards a dockerized server application
• Worked on the project of rectifying application server legacy code towards the goal of rectifying all the end points possible for a new release that gives users the capabilities of setting up the store though Rest API calls, and eventually for developers to be able to easily and quickly redesign the old layout, and to be able to come up with new user interface.
• Rectifying took place using JPA mapping framework.
• Java, PostMan, Rest-Assured, Python, Selenium, YML files, Swagger, Gradle, Shell Scripts, Bash, Junit, Maven, Nginx, and Docker.

IBM — Markham, Ontario, Canada
Performance Analyst Intern (IBM Digital Commerce-Performance Team) — May 2018 to Sept. 2018
• Monitored concurrent multi-threaded load test using JMeter to uncover functional or performance issues when the system is under a constant load.
• Monitored the system during upgrades to ensure that it is resilient, optimized, and has minimal downtime.
• Investigated issues in a docker-based environment using application logs, New Relic (application statistics), and Graylog (test client's statistics)
• Used Apache JMeter to create test plans
• Modified and managed the test plans Repo
• Automated maintenance tasks using Shell scripts
• Executed intensive load tests on docker-based environments for capacity and performance planning
• Used Graphite, Grafana, and New Relic to set up monitoring dashboards for performance analysis on docker-based environments
• Documented on a regular basis the maximum capacity and performance of docker-based environments
• Investigated memory leaks, thread locks, and bottlenecks on docker-based environments and assisted in enhancing the performance and capacity
• Automated Javacores/thread dumps, and Heapdumps dumping and extraction from the Dockrazied JVM servers during testing for better understanding the issues of the memory leaks and thread locks
• Self-initiated working on a user interface cross platform executable application to automate the dumping and extraction of heap-dumps and java cores/thread-dumps in a time-series manner . This is to allow the team members to extract heap-dumps and thread-dumps continuously throughout the capacity loading test on the docker-based environments to be able to investigate any memory leaks or thread-locks states through out the varying loading test. Used PyQt, Python, and Requests
• Researched different methods to achieve automated in real-time autoscaling for the docker based applications, was able to come up with a multivariable regression model
• Continuously researched and tried different docker configurations to achieve desired performance indexes
• Python, Requests, Graylog, Kibana, Kafka, Docker, Mesos, Marathon, DC/OS, Redis, Shell Script, docker, Bash, Git, JavaScript/Java, New Relic, Grafana, Apache JMeter, and Graphite

PROJECTS

Generic Vision Object Tracking — Feb. 2019 to Mar. 2019
• This project is a sub-project of a larger goal of being able to track a moving frame from another dynamic frame.
• Used OpenCV for tracking algorithms and looking forward to incorporating more than one camera including a heat camera, and adding a camera filter to be able to predict the dynamic moving feature within the moving reference frame. Thus, towards the main objective having a manipulator, being able to point the end effector towards the target in real-time.
• I am also looking towards implementing this in Nvidia-Jetson as the processor.
Link: https://github.com/doitmaan/OpenCV-PRACTICE