Murtaza Fatakdawala

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SKILLS

TECHNOLOGIES

Experienced:
C++ • Ruby • Python • Javascript • Kubernetes • Git • OpenCV • InfluxQL

Familiar:
Go • MATLAB • Bash Scripting • Docker • LaTeX • SketchUp • Blender

EXPERIENCE

JSI TELECOM | Software Developer
Jan 2018 – Apr 2018 | Ottawa, Canada

- Successfully adapted an open-source dynamic volume provisioner to enable CIFS storage for production Kubernetes clusters.
- Created API endpoints and improved controller for custom Kubernetes resources to simplify workflow for other teams.
- Modularized LDAP based authentication to the product to make it more efficient and reusable.
- Solved a variety of UI bugs in the front-end of the product to improve user interface.
- Technologies used include Ruby, Go, Javascript, Kubernetes, Docker, InfluxDB, bash and python scripting.

FUEL CELL RESEARCH | Research Software Developer
May 2017 – Aug 2017 | Waterloo, Canada

- Developed an automated method to identify and calculate defective area in microscopic images of membrane using hue, saturation and brightness values (HSB) with Python and OpenCV.
- Crack length analysis was accomplished using OpenCV contour detection along with minimum area rectangles to minimize error to below 5%.
- Cleaned and re-formatted raw CSV battery-testing data to Microsoft Excel files using MATLAB and Python.
- Created 3D models of experimental apparatus as well as materials using SketchUp and Blender.

WATERLOO AERIAL ROBOTICS GROUP | Computer Vision Team
Jun 2017 – Nov 2017 | Waterloo, Canada

- Created a C++ template workspace that integrated with the existing build system and test suites to be used by new software developers on team.
- Technologies used include Boost Test Suite, CMake, Git.

PROJECTS

MINI PIANO | Software Developer
November 2017

- Created a mini piano written in C++ using a the Onion Omega 2, a single-board computer.
- Included recording, saving and playback.

OUTFITTER | Co-developer at Waterloo EngHack
May 2017

- Co-developed a tool to help preview outfits while shopping for clothes online using Python and OpenCV.
- Completed over a 24 hour hackathon.

EDUCATION

UNIVERSITY OF WATERLOO
B.A.Sc in Computer Engineering
Expected June 2022

- Relevant Courses: Fundamentals of Programming (C++), Engineering Computation (MATLAB)