Jason Kim

Mechatronics Engineering

jasonkiim.com
github.com/jasonkiim
e53kim@uwaterloo.ca
226.606.3156

SKILLS

Software: Java, C/C++, Python, Data Structures & Algorithms, Unix, HTML, CSS, Javascript
Hardware: AutoCAD, SolidWorks, Arduino Uno, ARM Cortex MCUs, Raspberry Pi
Tools: Git, Eclipse, Xcode, OpenCV, Make, Keil, Bash, Jenkins, Confluence, JIRA, PyCharm

EXPERIENCE

Automation Test Developer, Rogue Wave Software *Sept - Dec 2016*

- Decreased the automated test execution time, written in Python, by 23%
- Debugged and resolved 22 client reported defects written in Java, C/C++, and Python for Linux & Windows
- Added 7 new test machines to increase product coverage, including various versions of Mac OS, Solaris, and AIX
- Wrote 37 automation tests in Unix environment to ensure product liability for all platforms

Software Member, UW Autonomous Sailboat Team *Apr 2016 - Present*

- One of the founding members of the University of Waterloo's Autonomous Sailboat Team
- Responsible for designing sensor feedback algorithm of RF Sensor from Arduino to the Jetson Embedded board

PROJECTS

Ball on Plate (In Progress)

See More at: www.jasonkiim.com

- An automated plate which stabilizes the position of a ball regardless of any interference using OpenCV to retrieve the position of the ball and sending this data to calculate the error difference using PID Contollers; actuated via Arduino Uno with two servo motors
- Current State: Currently working on calculating the error difference of the PID Controllers and outputting the data to a test prototype

Space Invaders

- Remake of a classic game "Space Invaders" using switches, the LED, slide pot, and a graphic image representation with 2D arrays on a TM4C123 Launchpad, deployed on embedded C using Keil IDE

Memory Bound

- User-friendly calendar application built using Object Oriented-Programming techniques in Java that allows personal log-in credentials via data encryption as well as a real-time built-in reminder function

Push Box

- A remake of a game "PushBox" using basic knowledge of data structures and OOP in Java, in which players move boxes to the marked positions, providing a challenging yet graphic gameplay with various levels and constraits

EDUCATION

University of Waterloo | Mechatronics Engineering B.A.Sc

September 2015 - 2020 (Expected), Waterloo, Ontario, Canada