Piratheipan Jeyakumar

Computer Engineer

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SUMMARY

Analytical software engineer with an ambitious attitude, phenomenal time management skills, and a strong user focus. Has developed several web and mobile apps, including a home security system using Raspberry Pi.

SOFT SKILLS

Leadership ●●●●● Expert

Collaborating ●●●●○ Advanced

Critical Thinking ●●●●○ Advanced

TECHNICAL SKILLS

LANGUAGES

JAVA, Kotlin, Dart, Swift, C, C++, Python, JUnit, HTML, CSS, PHP, Ruby, Java Script, FPGA VHDL, SSH, BASH Shell Scripting

DATABASES

SAS, MySQL, Firebase, MongoDB

TOOLS & FRAMEWORKS

GIT, JIRA, Flutter, Angular, IBM Doors, Jenkins, AWS, Matlab, Eclipse, PyCharm, Putty, Multisim, jQuery, Node.js, Android Studios

OTHER SKILLS

Proficient in OOP concepts, InDesign, Photoshop, Illustrator

PROFESSIONAL EXPERIENCE

SOFTWARE TEST AUTOMATION ENGINEER INTERN

Thales Canada, North York, ON / Sep 2018 – May 2020

- Developed rail signalling software for train systems in Hong Kong and Singapore
- Created **python** scripts that improved execution and efficiency of automated tests
- Actively implemented and maintained a Continuous Integration (CI) pipeline using python and **batch**, allowing for 24/7 automated testing on **AWS**
- Restructured engineering test cases based on requirements recorded in IBM DOORS.
- Executed nightly performance tests with various configurations and analyzed results for any discrepancies
- Developed libraries to support cross-project compatibility, effectively **reduced code duplicity by 75%** by using single choice design patterns.

ELECTRICAL ENGINEERING ASSISTANT (CO-OP)

Tertec Enterprise Inc., Markham, ON / Feb 2014 – Jun 2014

- Upgraded computer circuit boards by **soldering** new electrical components
- Organized inventory and recorded system information
- Worked side by side with engineers on projects for clients including Ford and Chrysler

PROJECTS

CAPSTONE: FPGA MOVE GENERATOR FOR GAME OF CHESS

Toronto, ON / Sep 2019 – Apr 2020

- Designed and implemented a chess engine using **C++** to **improve performance by 80%** of a game of chess by speeding up the process that determines the best chess moves

CONTROL OF SERVO POSITIONING MODULE

Toronto, ON / May 2018 – Jul 2018

- Analyzed various controller configurations including proportional controller, proportional + integral controller, and proportional + derivative controller
- Determined the stability of each control systems using **Matlab simulations**
- Tested and fine-tuned the control systems to determine optimal settings for the given response requirements
- Worked in a team of three to implement a combined control system using all three controllers Organized inventory and recorded system information

BANK SERVER APPLICATION

Toronto, ON / Oct 2017 – Nov 2017

- Created a simulation of a bank server, allowed clients and bank admins to have different levels of access to bank accounts using Object Oriented Design in **Java**
- Implemented **bridge design pattern** to create the bank server and to allow user to have more control
- Analyzed functional design and proposed quality requirements through detailed **use case diagrams**
- Designed a simple but effective GUI using **Java Swing** which was developed using Eclipse IDE

EDUCATION

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING (Dean's List)

Ryerson University, Toronto, ON / Apr 2020

- *Relevant Courses:* Algorithms and Data Structures, Object Oriented Analysis and Design, Software and Digital Systems, Computer Organization and Architecture, Operating Systems, Digital Image Processing, Computer Vision, Software Engineering, Fundamentals of Data Engineering, Computer Networks, Network Security