Kristina Isabelle M. Cortez

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Work Experience

NRT Technology Corp — Toronto, Ontario
Junior Payments QA Analyst — Jan. 2023 - April 2023, Sept. 2023 - Dec. 2023

- Communicated with POS and ATM terminals by accessing their audit files through a Linux environment to maximize testing.
- Implemented exploratory testing to validate elements returned from EMV chips and magnetic strips, resolving various bugs.
- Reported bugs and fixes on Jira to track company's progress with each updated version to reach product launch faster.

Toronto Liver Centre — Toronto, Ontario
Patient File Manager — June 2022 - Sept. 2022

- Directed a team of 8 individuals to complete over 1000 file transactions.
- Organized and managed patient documents through a healthcare database.
- Formulated and implemented a work strategy in order to maximize efficiency, creating file organization 50% faster.

St. John Paul II — Toronto, Ontario
Peer Tutor — Sept. 2021 - June 2022

- Conducted one on one tutoring sessions with high school students of all grade levels in mathematics and science.
- Monitored their progress through reflection sessions to ensure improvement within their course, found a minimal improvement of 5% in 100% of my tutees.
- Effectively provided unique explanations of subjects based on the student's learning style.

Projects

Traffic Light System *VHDL, Intel Quartus Prime* — July 2023

- Programmed a microcontroller using VHDL
- Created a Moore state Machine to transition between different traffic lights in an intersection
- Used buttons to implement a pedestrian crossing, LEDs to represent current state, and a 7 segment display to show the current stop light

Toyota Innovation Challenge *Python, OpenCV, Orbbec Astra SDK* — May 2023

- Programmed a system which uses machine vision to inspect the quality of Toyota's automated sticker application.
- Utilized the OpenCV library to analyze stickers using depth detection, shape detection, and hough transforms.
- Interfaced an Orbecc Astra camera for realtime image processing.

Personal Website *HTML, CSS, JavaScript, React* — April 2023

- Created different classes which were mapped to separate pages to create an interactive website.
- Used CSS to style the presentation of UI components as well as differentiating which interactive elements are used.

Water Contamination Detector *C++, AutoCAD, KiCad, Git, Jira* — Nov. 2022

- Utilized the I2C interface to allow for an STM32 microcontroller to transmit data to or from a PH sensor and light sensor, and an LCD display.
- Programmed communication between the serial peripheral interface and the hardware abstraction layer to output information on the lcd display.
- Designed schematics and built a circuit that simultaneously connected the microcontroller with three devices.

Skills

Programming Languages	C++, C#, CSS, HTML, Java, JavaScript, Python, VHDL
Frameworks	PyGame, React, Spring, Unity, Unreal Engine, Vaadin
Tools	AutoCAD, COMSOL, Git, Intel Quartus Prime, Linux, OpenCV

Relevant Education

University of Waterloo · Waterloo, Ontario
Candidate for BAS Computer Engineering · Sept. 2022 - Present