

MUHAMMAD AHNAF AHSAN

Electrical Engineering Graduate

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<https://github.com/Ahnaf39>

EXPERIENCE

Software Developer in Test (Co-op)

Unity Technologies

May 2020 – August 2020

Coquitlam, Canada

- Using C#, and Azure SQL database developed a voice recognition validation toolkit to compare transcribed speech with actual labels and used Levenshtein distance and Word Error Rate to get model accuracy
- Developed product image recognition validation toolkit to compare predicted and actual bounding boxes and get the model accuracy
- Designed a web tool to allow QA verification using the validation tool kits

Quality Assurance Analyst (Co-op)

Finger Food Advanced Technology Group

September 2019 – April 2020

Coquitlam, Canada

- Identified bugs and regressions in blockchain applications using manual and automated testing for quality assurance
- Participated in bug triage meetings with clients to analyze the severity of code bugs and issues for maximizing user satisfaction
- Use the Postman tool to test REST API for user transactions and application usage with test-net bitcoin.
- Identified 890 bugs over the 8-month period which lead to a successful launch of the applications
- Performed rigorous black-box, end-to-end, regression, integration, UI tests to judge project quality, health, and robustness

DESIGN TEAM

Machine Learning Engineer

UBC Open Robotics

September 2020 – June 2021

Vancouver, Canada

- Developed a home and hotel assistance robot capable of navigating, communicating and picking up items for the user
- Implemented the SLAM navigation of the robot utilizing ROS (Robotic Operating System) and Python for the robot to travel to a tracked object or follow its owner
- Qualified to the finals for Robocup@Home competition alongside 7 other teams globally out of over 100 participating teams

CAPSTONE PROJECT

Gesture Controlled Robot Pet

UBC ECE Capstone

September 2021 – April 2022

Vancouver, Canada

- Developed a robot pet that captures body gestures by the user
- Recreates traditional pet actions like following the user or spinning but additionally can take a picture of the user
- Used Python, ROS and Deep Learning technologies to build the state machine of the robot capturing the gestures and performing the associated action

EDUCATION

Bachelor of Applied Science

The University of British Columbia

Graduated May 2022

Relevant Courses

- Data Structure and Algorithms
- System Software Engineering
- Deep Learning
- Machine Learning Fundamentals for Engineers
- Introduction to Microcomputers
- Electrical Engineering Design Studio I and II
- Introduction to Robotics

SKILLS

Java C# C MATLAB

Verilog Arm Assembly

Python Git

Agile Framework FPGA

SQL ROS

PROFESSIONAL AFFILIATIONS

IEEE UBC Student Branch

September 2018 – April 2019

Co-organized IEEE Think Engineering event for the year 2019

Think Engineering is a networking event that allows prospective engineers to talk and discuss with people in the industry