Henry A. **Odunze**

BASc. Electrical Engineering

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Education

University of Waterloo *Waterloo, ON*
BACHELOR OF APPLIED SCIENCE IN ELECTRICAL ENGINEERING *Sep 2015 - June 2020*

- Algorithms and Data Structures, RF and Microwave Circuits, Distribution Systems, Control Systems, Management Science

Skills

Languages/Frameworks C++, Python, JavaScript, Java, HTML5, Hadoop, MySQL, VHDL, Powershell, Django, ARM architecture
Development Platforms Android Studio, InVision, Git, Selenium Webdriver, MATLAB, JIRA, IntelliJ, AS/400

Experience

Cognitive Systems Corporation *Waterloo, ON*
DIGITAL SIGNAL PROCESSING ENGINEER INTERN *Sep 2019 - Dec 2019*

- Created a zone detection feature, using **Python** and **NumPy** library, for the company's WiFi motion algorithm to improve its degree of accuracy on predicting zones in a test region
- Validated simulation of zone detection feature via regression testing with Python scripts on **Linux** system
- Responsible for quality assurance maintenance of the motion detection algorithm features with **Trello** and **Grafana** applications

PRGX *Mississauga, ON*
JUNIOR SQL DEVELOPER *Sep 2018 - Dec 2018*

- Executed audit data processing including data aggregation, and transformations on **MySQL** and **Hadoop** platforms to analyze audits for big businesses like Walmart and Sobeys
- Managed multiple data resources and handled local client data loading with **Hercules** system on **AS/400** architecture
- Administered over **1000000+** backlogged email extraction, ingestion and conversions from PST to EML formats to evaluate for auditing and possible claims for respective clients

AudienceView Ticketing Corporation *Toronto, ON*
SOFTWARE AUTOMATION DEVELOPER INTERN *May 2017 - Aug 2017*

- Developed **JS** scripts on **Selenium Webdriver** to manage e-ticketing and settlements on a CMS software
- Refined CMS platform's automated web UI, with **Webdriver API** handlers, and extending its browser capabilities to Firefox and Safari
- Created an automation web code structure for the CMS solution using **JavaScript** and **NodeJS** with **HTML5** for browser elements

eSolutions Group *Waterloo, ON*
QA ANALYST *Sep 2016 - Dec 2016*

- Structured page templates for Cambridge City Services and developed test cases, with **Testlodge**, to test for various user interactions
- Developed MS **Powershell** automation scripts and integrated **Pester** for more efficient quality management on web solutions
- Designed website models and site map templates with **i:Create**, a CMS tool, for future design projects

Projects

Onyx Waste Management Optimization System *Waterloo, ON*
DESIGN PROJECT *September 2019*

- Onyx is a smart waste collection system that provides intelligent monitoring of waste containers with IoT fill-level sensors as well as route optimization for efficient collection
- Devised the PCB layout, with **Agilent ADS System** for the components of the Time-of-Flight sensor to be used in waste containers
- Assembled the sensor circuit board components - the microprocessor, voltage regulator, 2G SIM Module, etc., by soldering techniques

Myo Gesture Control *Waterloo, ON*
EXTRACURRICULAR PROJECT *May 2018*

- Myo Gesture Control uses **Myo** armband by Thalmic Labs to provide gesture control capabilities on mobile and web applications
- Implemented HM-10 BLE module on **Arduino** via **CCLoader**, with IR signals assigned to Myo gestures for gesture control