Steeve Johan Otoka

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Education

York University Jan. 2020 – May 2024
Honours Bachelor of Computer Engineering *Toronto, ON*
Courses: Algorithms and Data Structures, Software Design, Software Requirements, 3D Computer Graphics, Computer Vision, Embedded Systems

Experience

Research Assistant Oct. 2022 – Apr. 2023
Lassonde School of Engineering *Toronto, ON*
- Assist in the research project on materials discovery with high entropy alloys using machine learning
- Responsible for developing a machine learning algorithm to predict the main structure of an alloy given the its metallic constituents

IT Executive Oct. 2022 – Feb. 2023
ElleHacks 2022 *Toronto, ON*
- Use **Figma** to design web site mock-ups for ElleHacks 2023
- Develop the ElleHacks 2023 website using Figma plug-ins alongside with **HTML, CSS and JavaScript**
- Work in a team using the **Agile** methodology for constant collaboration and continuous improvement at every stage of the project

Research Assistant May 2022 – Aug. 2022
Lassonde School of Engineering *Toronto, ON*
- Monitored and tracked the behavior of important aspects of laser-powder-bed fusion 3D printing to understand the origin of the defects appearing in the printing
- Built a **Python** application making use of **OpenCV** to process images and videos of the 3D printing process
- Pre-processed data from a high-speed camera and photo-diodes in the appropriate format for an **Artificial Neural Network** model and use in **K-means clustering**

Projects

World Bank Data Graph Maker | *Java, Maven, SpotBugs, JUnit, Randoop* Sept. 2022 - Dec. 2022
- Implemented different software design patterns to build a fully functioning application fetching data from the World Bank API and displaying graphs generated from those data
- Worked in team and used **Jira** for issue and project tracking
- Used tools and libraries such as **SpotBugs**, **Randoop**, and **JaCoCo** to achieve non-functional requirements

clARity (Hack the Valley Best App Winner) | *Android Studio, Java, Python* Oct. 2022
- Built an app that helps people struggling with anxiety, depression, and other mental health conditions by picturing their thoughts and dreams for journaling purposes
- Used the **Chaquopy SDK** to establish a link between the Python and Java code bases and make API calls
- Used the **Wombo API** to make **AI**-generated art work to create the user's journal entry

CampUsMeet (TuffyHacks winning project) | *React, Node.js, Express, MongoDB* Feb. 2022
- Built a web scheduling application to facilitate university students meeting during their free time on campus
- Designed the server side of the web application using **Node.js**, **Express**, and **MongoDB**

Covid-19-visualization | *Jupyter Notebook, NumPy, pandas, Matplotlib, Seaborn* June 2021
- Analyzed Covid-19 data obtained from a public CSV file being updated twice a day
- Plotted data on different graphs to present the evolution of the Covid-19 virus in Canada and worldwide

Technical Skills

Languages: Java, Python, JavaScript, HTML/CSS, C, C#, SQL (MySQL), MATLAB, Bash, Verilog
Frameworks/Libraries: React, Node.js, Flask, JUnit, OpenCV, pandas, NumPy
Developer Tools: Git, Postman, Unity, Figma, Jira

Other

Languages: French (Native), English (Fluent)