Xyron Brual

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EDUCATION

Ontario Tech University   **2000 Simcoe St N, Oshawa, ON, Canada**
Bachelor of Engineering (Honours)   *Sep 2018 - May 2022*
*Software Engineering with Highest Distinction **(GPA: 4.02/4.3)***

- **Relevant Courses:** Design and Analysis of Algorithms**,** Data Structures, Web Programming, Linux Systems Programming, Operating Systems, Software Design and Architecture, Software Quality, Computer Networks, Data Management Systems
- **Awards:** President's Honour's List, OPG Entrance Scholarship, Honourable George Vari Scholarship

SKILLS

Languages: Python, HTML, JavaScript, CSS, PHP, C, C++, C#, Bash, Perl, Java, SQL, Lua, R, Ruby

Technologies: Git, Node.js, Flutter, MySQL, Flask, Django, React, OpenCV, TensorFlow, Streamlit, Unity Engine, Blender, Microsoft Office, Linux, Windows, Amazon Web Services, Figma, Vercel, NextJS, MongoDB, TailwindCSS, Ruby on Rails

EXPERIENCE

musQueteer   **Remote**
Backend Developer   *Apr 2024 - Present*

- Developed and maintained backend systems using Ruby on Rails, ensuring high performance and reliability.
- Managed databases, including PostgreSQL and MySQL, by seeding databases to ensure consistent data for development and testing.
- Refactored existing code to enhance readability, efficiency, and maintainability.
- Managed Rails jobs to synchronize Salesforce databases with clients' local databases, ensuring data integrity and consistency.

Cognixia JUMP Program   **Remote**
Data Analyst/Developer Intern   *Apr 2023*

- Developed technical skills in various data manipulation and visualization techniques under the coaching of Cognixia experts
- Coordinated multiple team-oriented projects using Git, Python, Object-Oriented programming and Visual Studio Code
- Trained in various technical and soft skills reinforcing the understanding of the Agile framework and Database Management Systems

Queen Square Doctors   **Brampton, ON, Canada**
Medical Administration   *May 2022 - Dec 2022*

- Collaborated with a team of doctors and acted as an intermediary to their patients concerning admissions, prescriptions and medical claims
- Ensured that patients were properly taken care of during phone calls, check-ins and allocation of patient rooms
- Assisted management in the coordination of workflow including the handling of the medical staff's documentation and equipment

Tip-Top Creamery Ltd.   **Whitby, ON, Canada**
Assistant Store Manager/IT Technician   *Sep 2018 – April 2022*

- Programmed cash registers and websites, and installed security cameras for monitoring
- Maintained and troubleshot monetary systems to ensure smooth workflow
- Developed the organization's main website to help customers understand the services provided
- Performed product inventories, handled various purchases, and managing deliveries
- Managed the renovation and interior fit-out of the store

PROJECTS

Lines (Threads/Twitter Clone)
Languages/Technologies: TypeScript, HTML, CSS, JavaScript, NextJS, MongoDB, TailwindCSS   *Jan 2024*

- Developed a social media platform inspired by Threads/Twitter using NextJS, MongoDB and TailwindCSS enabling users to create posts, follow others, and join communities
- Implemented threaded posts and comments, a follow system, and "Circles" for community interactions
- Designed and built the backend using NextJS and the database with MongoDB to ensure scalability, performance, and security

TypeMaster
Languages/Technologies: Python, Django REST, React, Bootstrap, Figma, Vercel, AWS EC2   *October 2023*
- Created a typing test service that evaluates typing speed and accuracy by providing users with quotes to type.
- Implemented user account functionality to track progress and view typing history.
- Designed the user interface in Figma and brought it to life using React and Bootstrap.
- Developed the backend using Django REST framework with models representing typer, quotes, and records. Hosting on AWS EC2 ensures scalability and availability.

Little Lemon
Languages/Technologies: React, Node.js, JavaScript, HTML, Tailwind CSS   *August 2023*
- Developed a virtual Mediterranean restaurant interface with an intricately designed front page and an interactive table reservation system using React
- Implemented dynamic reservation scheduling using a mock API, generating random dates and times for an engaging user experience
- Enhanced UI aesthetics by implementing TailwindCSS

LetsCook
Languages/Technologies: JavaScript, Node.js, React, Bootstrap, ChatGPT   *June 2023*
- Developed LetsCook, a dynamic web application using React, Bootstrap, and ChatGPT API to enable personalized recipe generation based on user-provided ingredients.
- Implemented an intuitive user interface for a seamless and interactive cooking experience.
- Utilized AI technology to revolutionize the way people approach cooking and meal planning.

Notion Agenda Wallpaper
Languages/Technologies: JavaScript, Node.js, Notion, HTML, CSS   *June 2023*
- A Node.js project automating dynamic agenda generation as a wallpaper.
- Utilized Notion's API to query tasks from a designated agenda database on Notion.
- Developed HTML to image conversion functionality and implemented Windows service configuration for periodic updates.

Floppy Bird
Languages/Technologies: Python, PyGame, Pandas   *April 2023*
- Developed a Flappy Bird clone for PC utilizing Python's PyGame module.
- Implemented score-saving functionality using Python's Pandas module to record and store high scores.
- Demonstrated proficiency in game development, Python programming, and data handling.

Queen Square Employee Manual
Languages/Technologies: Canva   *Jan 2023 – Mar 2023*
- Made use of the Canva platform to develop a handbook for new incoming staff
- Documented the basic tasks and responsibilities of new staff in order to reduce training time
- Provided multiple appendices that allowed both new and older staff to refer to any information that they have forgotten

Stocks Recommendation System
Languages/Technologies: Python, HTML, CSS, JavaScript, PHP, SQL,   *Sep 2021 – Mar 2022*
Django, Bootstrap, Tensorflow
- Created a web application using the Django framework that allowed users to keep track of stocks and make buy/sell/stay decisions based on our predictive algorithm and trading strategies
- Developed a neural network using Long Short Term Memory cells that has a strong correlation of 0.86 when predicting S&P 500 stock prices
- Implemented various famous strategies to assist users in making their decision

Packet Sniffing Firewall
Languages/Technologies:Python   *Jan 2022 – Mar 2022*
- Produced an application that increases the security over the network while providing users information on incoming packets
- Developed an algorithm that examines packets in the transport layer and examines if they have a registered DNS request to indicate that they are safe

Stocks R Us
Languages/Technologies: Dart, Python, Flutter, Flask, MVC Architecture   *Sep 2021 – Dec 2021*
- Utilized the Flutter framework to create a stocks tracker mobile application using the Model-View-Controller architecture
- Constructed an SQLite database to keep track of users and their personalized favorites
- Created a Python API using the Flask framework to retrieve stock information from Yahoo! Finance's services and for data management

Facial Recognition System
Languages/Technologies: Python, OpenCV, PySimpleGUI   *Jan 2021 – Mar 2021*
- Created a facial recognition system using Python and its libraries such as OpenCV and face_recognition that has a 99% accuracy of identifying "known" users
- Gathered the reference images and information of "known" people that the OpenCV module uses to compare against faces in other images and live scans

Cars Canada (Car Rental Website)
Languages/Technologies: HTML, CSS, JavaScript, PHP, SQL, Bootstrap   *Sep 2020 – Dec 2020*
- Managed a group for the design and development of a working car rental website
- Utilized MySQL, PHP and JavaScript to create databases, and handle personal and payment information
- Auto-generated HTML pages using PHP based on the relational database information, reducing the need for excessive page creation

K-Means Color Clustering
Languages/Technologies: Python, SciKit, Streamlit   *Jul 2020 – Aug 2020*
- Developed a program using Python and the SciKit library that uses K-Means clustering for the purpose of quantizing an image's color scheme
- Designed the program so that when an image and a select number of clusters are given, then a quantized image and a histogram on the proportion of the most prominent colors

Endless Battle
Languages/Technologies: Unity Engine, C#, Blender   *Jul 2020 – Aug 2020*
- Utilized the Unity Engine and various assets to develop an endless 2D platforming and fighter game that can be played on a PC platform
- Designed the player using character assets and animations in order to have a smoother experience while playing
- Created a procedural level generator using a 10x5 boolean array in order to create unique placements of platforms for each new level
- Designed enemies with difficulties marked as easy, medium and hard with varying movement and attack speeds, health, and attack damage

The Great Plateau
Languages/Technologies: Unity Engine, Blender   *Aug 2019 – Sep 2019*
- Recreated a section from the popular Nintendo game Legend of Zelda Breath of the Wild
- The scene was made in Unity using multiple tools to create the terrain and textures and multiple prefabs for the environments such as trees, grass, water, snow, fog, etc.

CERTIFICATIONS
- Generative AI with Large Language Models   *November 2023*
- Meta Front-End Developer   *August 2023*
- Devops on AWS   *July 2023*
- HackBytes Hackathon Certificate   *June 2023*
- Google IT Automation with Python   *May 2023*
- Google Data Analytics Professional Certificate   *Feb 2023*
- Data Analysis with Python   *Jan 2023*
- Machine Learning with Python   *Jan 2023*
- Scientific Computing with Python   *Jan 2023*
- Aconex Accredited Level (Specialist)   *Jan 2023*
- Aconex Accredited Level (Professional)   *Jan 2023*
- Aconex Accredited Level (Associate)   *Jan 2023*