# Ariel Johannes Computer Science Student

## **EDUCATION**

Western University, Bachelor of Science | Specialization in Computer Science

- Involved in clubs and activities: Hack Western 8, Seniors in I.T, WesternAI, CAISA, CSA, WOOF.

2020 - 2024

Relevant Coursework: Computer Science Fundamentals I & II, Data Structures and Algorithm, Software Tools and System
Programming, Intro to Software Engineering, Discrete Structures for Computing, Object-Oriented Design and Analysis.,
Analysis of Algorithms, Intro to Artificial Intelligence.

London, ON

## **EXPERIENCE**

#### Software Development Intern, Citi

Futures Derivatives and Clearing Technologies (FDC) Team

05/2023 -08/2023

Transformational Automation: Spearheaded the development of a full-stack QA application, automating a previously
manual process and achieving an unprecedented 14,300% improvement in QA speed and efficiency. This innovation
significantly bolstered Citi's internal operational standards and reinforced trust in data-driven decision-making.

Mississauga,

- Full Stack Development & Integration: Designed an intuitive user interface using HTML, Javascript, and CSS. Established
  a robust backend with SQL, JDBC, Java, and Spring Boot, ensuring seamless integration with Citi's proprietary codebase.
- Stakeholder Collaboration: Actively collaborated with cross-functional teams, incorporating their insights for iterative refinements. Delivered comprehensive user documentation and led training sessions, facilitating smooth application adoption across departments.
- Data-Driven Fintech Solutions: Positioned the application at the core of financial exchange deals, ensuring meticulous metadata processing and analysis, further solidifying Citi's reputation for accuracy and consistency in the Futures Derivatives and Clearing Technologies (FDC) domain.
- Best Practices & Versatility: Upheld rigorous code review standards, utilized Git for version control, and integrated Agile
  methodologies via JIRA. Demonstrated adaptability by undertaking a side initiative employing Tableau, Python, and
  Pandas for data analysis.

#### Computer Systems Analyst Intern, Canadian Musicians Co-operative

 Quality Assurance and Database Management: Conducted rigorous unit testing with Selenium to ensure app stability and reliability. Managed SQL server ensuring optimal performance and security. 06/2022 – 08/2022 Remote

- Hybrid Mobile App Development: Led the development of an Android app using a unique combination of Vue.JS (for the front-end interface) and Cordova (for mobile platform translation). Leveraged Docker for consistent deployment environments, and directly improved query performance to the backend database using SQL optimizations, achieving a 12% boost in data retrieval efficiency for users.
- Tech Training and Collaboration: Hosted tech workshops and steered cross-functional meetings, achieving a notable 50% reduction in help desk tickets, thereby amplifying organizational IT awareness and security measures.
- Innovation Scouting: Proactively assessed and evaluated emerging technologies, providing actionable insights and recommendations for potential organizational innovation and tech adoption.

# Volunteer - Tech Support for Seniors, Western's Seniors in I.T.

 Tailored Training: Adapted training materials and methods to cater to individual learning paces and diverse tech backgrounds, ensuring effective skill acquisition among senior participants. 09/2020 – present London, ON

- Problem-Solving: Troubleshot a broad range of tech issues, ranging from hardware malfunctions to software glitches, demonstrating versatility and a deep understanding of common user problems.
- **Effective Communication**: Bridged the technology knowledge gap for senior participants, fostering an environment of patience and understanding, leading to enhanced technology adoption and user confidence.

#### **SKILLS**

**Programming,** Java, Python, JavaScript, C#, C++, C, R, MATLAB, Bash, PHP

Libraries / Frameworks, React.js, Node.js, Spring Boot, Express.js, Flask, Vue.js, Selenium, JUnit, Tailwind

#### **Development Tools and Databases,**

SQL, MySQL, Git/GitHub, Agile, Unix & Linux, MongoDB, CSS, HTML, JIRA, Virtualization, PostgreSQL, Apache MadLib

## **PROJECTS**

Kept, Housekeeping Made Easy (React.js, Express.js, Node.js, PostgreSQL)

- Engineered an application targeted at roommates and households, simplifying housekeeping tasks with the integration of AI.
- Leveraged Google Vision Machine Learning Model to validate task completion, ensuring chores are accomplished.
- Promotes a structured environment, especially beneficial in shared living spaces.

#### PyDano, Flask Stack dApp (Python, React.js, Flask, Blockfrost)

- Personal project born out of passion for blockchain technology, particularly focusing on the Cardano platform.
- Enables users to mint NFTs on the Cardano Testnet with the added assurance of security through the Blockfrost API.
- Deepened understanding of developing on a public ledger-like blockchain, capturing the nuances of blockchain application development.

## Kurls, Workout Data Aggregator (MERN Stack: Mongo DB, Express.js, React.js, Node.js)

- Devised an application catering to fitness enthusiasts, assisting them in tracking and aggregating workout data for personal progress.
- Features a built-in workout leaderboard, motivating users to consistently improve.
- Prioritizes user experience, ensuring an intuitive interface and workflow.

# **Brach.io,** A Prehistoric Penny Pincher (C++, Qt)

- A desktop personal financial management application.
- Rewards users for excellent financial decisions.
- Efficiently summarizes and tracks user's finances, cashflow, stocks and cryptocurrency

## NavUWO, Interactive Campus Map (Java, JavaFX)

- Conceived and developed an interactive map of Western University as an academic project.
- Data integrity maintained by scraping and verifying details from Western University's directories and PDF resources.
- Offers a comprehensive view of the campus layout, aiding in locating classrooms and eateries, even though it's a private tool.