

Noel Zacharia

519-400-8480 | zacharin@mcmaster.ca | linkedin.com/in/noelzacharia | noelzacharia.netlify.app | github.com/nz2000

Experience

Cyber-Security Intern

Ottawa, Canada

ISED, Government of Canada

May 2020 - Present

- Collaboratively developed confidential projects using authorized **Secret Clearance**
- Successfully implemented **Blockchain**, Network Splicing and **Encryption** to improve efficiency within sensitive **IoT** and **5G** projects by **15%**
- Identified trends within Data Exfiltration, Smash & Grab, Data Smuggling and Command & Crash attack patterns and presented them to the **Director General** and **ADM's** of ISED, Canada
- Utilized **Shodan**, **SQL**, Malware (Mirai/Bash Bug), Linux Worms (Wifatch) for cyber-resilience projects

Co-President & Founder

India - Canada

Halcyon Foundation

Jan. 2019 - Present

- Established a **Self-Directed Group** to address caste-based inequalities in accessing educational resources in a global context and analyzed and interpreted related data to think of viable solutions
- Grew the organization from **Two** members in the beginning to **Seventeen** members at its peak

Projects

Cryptographic Algorithm Solver

- Developed a program using **Python 3** that can simultaneously **Encrypt** and **Decrypt** data for transmission using ciphers such as: Caesar, Vigenere, Vernam, Hill and Rail Fence Cipher while maintaining statistical randomization

Real-Time Impact Monitor

- Successfully designed and presented (**Ibiomed Design Expo**) a working model of a sports helmet which detects when the user is at risk of a concussion
- Incorporated Python 3, **Raspberry Pi**, Force Sensors along with **Data Analytics** to design this device

Full Stack Catalogue Manager

- Developed an interactive **Email-verified** website for university students to share academic information
- Utilized Python 3 (**Flask**), **JavaScript**, **CSS3 (Bootstrap)**, **HTML5** and **SQLAlchemy** for deployment

2-D Battleship Game

- Recreated the game of 'Battleship' using **C**, now featuring several customizable levels and styles of play

Honors & Awards

- Admitted to **Medical School** in India amongst 1,326,725 Candidates
- Captained Debate Team into Semi-Finals of **World Schools Debating Tournament**, Ahmedabad
- Awarded by India's **Ministry of Finance** due to a Perfect Score (10/10) in the All India Board Examination given by 1,491,293 Candidates
- Ranked **12th** and **26th** Internationally amongst 11,400 Candidates and Two-time Gold Medalist in the country for **NISO Science Olympiad**
- Three-time Silver medalist in the **International Olympiad** of English Language (1000+ Candidates)

Skills

- Languages: Python, JavaScript, C, Java, CSS, HTML, Bash, SQL, MATLAB
- Frameworks/Technologies: Flask, JQuery, Bootstrap, NumPy, Matplotlib, SQLAlchemy, SQLite, Shodan, Microsoft Office, Git, MacOS, Linux (Kali/Ubuntu)

Education

Software and Biomedical Engineering, McMaster University, GPA: 3.77

Expected: April 2024