Varun Venkataramanan

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EDUCATION

University of Waterloo   Sept 2018 - April 2023
Bachelor's Computer Science (co-op) with a Minor in English Literature

- Activities: Sports Editor at *UW Imprint* (school newspaper), long-distance running

EXPERIENCE

Huawei Canada - Waterloo Research Centre   May 2020 - Aug 2020
Assistant Researcher Intern

- Used **C++** and **Python** to develop APIs and applications for Hardware Security Modules (HSM)
- Created a web application for Key Management Systems (KMS) using **Python Flask** and **SQLite3**
- Performed literature reviews on steganography, trusted execution environments (TEEs), and HSMs

Qualcomm   May 2019 - Aug 2019
Embedded Software Engineering Intern

- Contributed to the **Android Open Source Project (AOSP)**, pushing **Java** code to the Android Q mainline
- Developed a low-level **C++** framework for video post-processing on the Snapdragon 865 SoC
- Created an Android platform application to showcase realtime slow-motion capture on mobile devices

Per Vices Corporation   Jul 2018 - Aug 2018
Junior Software Developer

- Developed automated test suite for Software Defined Radios using **Python**, **C++** & **GNU Radio Companion**
- Implemented automated deployment pipeline and continuous delivery using **GitLab**

App Mastery Inc.   Jul 2016 - Aug 2017
Software Developer

- Developed **Android**/**Amazon TV** applications for 5 clients with **10,000+ installations** using **Java**/**Kotlin**
- Created a RESTful API and client-side portal to dynamically configure Android/iOS/tvOS applications at runtime with **Node** & **Firebase**
- Libraries: RxJava, Dagger, ExoPlayer, Retrofit, Architecture Components, Koin, Android KTX

The Reckoner of MGCI   Sep 2015 - Jun 2018
Editor in Chief

- Oversaw the operations of a newspaper with 80+ student staff
- Redesigned the website with **WordPress** and developed its **Android Application** with **200+ installations**
- Published numerous articles on school and community events, as well as op-ed's on sports and politics

PROJECTS

US Election Interactive Feature
Best Electronic Feature, Toronto Star Journalism Awards

- Set of **D3.js** & **R** interactive charts accompanying a feature article analyzing the 2016 US Presidential Election.

Magnetic Field Simulator

- Simulation and visualization in **MATLAB** of the magnetic field interactions between multiple solenoids as described by Biot-Savart Law.

AWARDS

- **1st Place**, Electronic Layout, *Toronto Star*, for *Serge Ibaka: Missing in Action* (2018)
- **1st Place**, Sports Writing Feature, *Toronto Star*, for *DeMar DeRozan: Underrated But Never Overlooked* (2017)
- **1st Place**, *StarterHacks 2017*, for RapChatz
- **1st Place**, High School Science Competition, *CNC-CIE*, for research paper on lighting flicker