

# Chandrakiran Subramaniam

Computer Engineering, University of Waterloo (Winter 2021)

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## SUMMARY OF SKILLS

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- **Proficient exposure to application/web servers & databases during co-ops:** IBM WebSphere/IHS, MQ Server, Tomcat, Oracle 12c, MySQL, Access DB, MS Server 2012/16, UEM/BEMS
- **Prior scripting experience shown via development tasks at NCR and Manulife:** Python, Bash, YAML, PowerShell/PowerCLI, Perl, JSON, Scala
- **Proven technical experience with virtualization/containerization technologies:** Docker, Kubernetes, VMware vSphere, VirtualBox, Azure, EC2/ECS, Packer.io
- **Excellent application programming demonstrated through various self-authored projects in:** C++, C, Java, HTML/CSS, Node/JS, PHP, VHDL/Verilog, MATLAB
- **Well versed CI/CD and version control concepts shown through past co-ops:** Git, Jenkins, Selenium, JIRA, Confluence, Bitbucket, Ansible
- **Admirable exposure to distributed systems and artificial intelligence (AI):** Thrift, Kafka, ZooKeeper, Hadoop/Spark, PSO/GA/ES

## RELEVANT EXPERIENCE

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### Sun Life Financial - DevOps Automation Engineer (Co-op)

Sep. 2020 - Current

Toronto, Ontario

*WebLogic, WebSphere, Maven, ANT, Git, Bitbucket, TFS, Jenkins, Fastlane, Gradle, Ansible, Docker, Python, Java/J2EE, Docker, IaC*

#### • Current role.

- Deploy, configure, manage, and perform ongoing maintenance of fully automated ALM systems.
- Assist the development team with the preparation of releases for production via:
  - Automation of performance tests.
  - Validation of infrastructure requirements (Java/.NET).

### NCR Corporation - Software Engineering (Co-op)

Sep. 2019 - Dec. 2019

Waterloo, Ontario

*VMware vSphere, VMware Studio, PowerShell, Python, Docker, Bitbucket, MS Access, regex, PhotonOS, Confluence, JSON, Packer.io*

#### • Facilitated infrastructure enhancements via automation:

- Scripted cross-platform automation solutions in Python, **reducing overall search time by ~12%**.
- Created a monitoring solution to track ePolicy migrations, improving the data center workflow.
- Developed PowerShell scripts to automate the VMware hosts inventory, **ensuring data consistency**.
- Constructed a RESTful API to parse and store firewall requests to an Access database, easing data accessibility & availability.
- Spearheaded the effort to implement an in-house virtual appliance solution, using PhotonOS & JSON.

### BlackBerry Limited - Enterprise Technical Analyst (Co-op)

Jan. 2019 - Apr. 2019

Waterloo, Ontario

*BlackBerry UEM, BBM, BB Dynamics & BEMS, Salesforce, Confluence, DNS, TLS, Kerberos, IoT, JIRA, MDM, Coveo, SQL*

- Proactively developed a custom SQL script, addressing a third-party licensing issue for handheld devices.
- Enterprise Mobility Management (EMM) trained specialist:
  - Worked to maintain & improve the serviceability of the BlackBerry Spark enterprise suite, **averaging +50 tickets**.
  - Analyzed & resolved escalations from the previous support tier, **with a 100% closure rate**.
  - Participated in beta tests of new BlackBerry version releases, and service packs.

### Manulife Financial - Systems Integrator (Co-op)

May 2018 - Aug. 2018, Sep. 2017 - Dec. 2017

Waterloo, Ontario

*Docker/Kubernetes, PaaS, CSS/HTML/XML, IBM AIX, IBM WebSphere & HTTPS Server, JYTHON, ServiceNow*

#### • Provided technical support for business-driven initiatives:

- Orchestrated seamless deployments to various testing environments (DEV, UAT, QAT) for developers/release teams.
- Managed application deployment of four business units to production, **with a +95% success rate**.
- Provided after-hours support for the quarterly AIX server patching, mitigating vulnerabilities.
- Aided in infrastructure design and solution planning:
  - Authored a JYTHON script to automate version control for the C360 application, **reducing deployment time by ~10%**
  - Experimented with Docker & Kubernetes to enhance established application deployment processes.

## KEY PROJECTS

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### PhysioTelepy (Final Year Design Project)

May 2020 - Current

- An interactive computer vision system to analyze therapeutic exercises via a depth camera. **More info**
- Project stack includes Intel RealSense, NuiTrack SDK, OpenGL, Qt, Go, and MySQL.

### Password Safe (Web Application)

Jun. 2020 - Current

- Built using JavaScript (client), PHP 7.4.5 (server), SQLite 3 (database), and HTML/CSS. **More info**
- Security concepts such as hashing (SHA2-256), encryption/decryption (AES-256 CBC), and salting were employed.

### Custom Social Network (Database Concepts)

Mar. 2020 - May 2020

- Implemented via APIs (Express.js) and a database (MySQL). **More info**
- Database concepts such as indexing, ER diagrams, and normalization aided in project design.