

Carter MacLennan

linkedin.com/in/cartermaclellan | cartermaclellan1@gmail.com | Fredericton New Brunswick, Canada

Technical Skills

Languages: Java, Python, JavaScript, SQL

Data: Spark, Airflow, Postgres, ClickHouse, JanusGraph

Other: React.js, Cypress.js, JUnit, GitHub, Jira

DevOps/ Infra: AWS, Kubernetes, Docker, CircleCI, Jenkins

Education

BSc of Software Engineering – University of New Brunswick

Sep 2017 - Apr 2022

- 4.0/ 4.3 GPA
- IEEE NB Section Prize Winner for Senior Capstone Design Project
- Clubs & Societies: Peer Mentor, Barbell Club

Certifications

AWS Certified Data Analytics - Specialty – Amazon Web Services

Certified DAG Authoring for Apache Airflow – Astronomer

Certified Associate Developer for Apache Spark 3.0 – Databricks

Professional Experience

Sonrai Security – Software Engineer, Data

May 2022 – Present (1YR, 5 MOS)

- Developed Apache Spark ETL jobs to ingest TBs of data daily and produce recommended least privilege policies for identities in AWS/ Azure/ GCP cloud using Java, JanusGraph, Elasticsearch, and Postgres.
- Expanded Sonrai's backend effective permissions engine to enable users to visualize access gained through trust relationships and access keys in the cloud using Apache Spark, JanusGraph, and ClickHouse.
- Scaled our data pipelines for Fortune 100 customers through SQL tuning, conducting a POC to move our job orchestration from Cron to Apache Airflow, and aiding in migrating our OLAP database from Postgres to ClickHouse.
- Actively participated in the on-call rotation for production data pipelines and served as the Iteration Manager, overseeing daily scrums, assisting with the product backlog, and mentoring co-op students.

Sonrai Security – Software Engineer (*Internship*)

May 2021 – Nov 2021 (7 MOS)

- Resolved 15+ high priority customer facing frontend bugs and hotfixed to production.
- Developed new React.js frontend widgets using JavaScript/ HTML/ CSS and integrated with GraphQL queries.
- Significantly improved UI performance by refactoring the frontend to utilize lazy loading on 5 different screens.
- Implemented new frontend search filters and updated internal JavaScript libraries to enable regex injection into search results.

VeroSource Solutions – Full-Stack Developer (*Internship*)

Sep 2020 – Mar 2021 (7 MOS)

- Using Java, I developed two Spring APIs for our dev environments to simulate the APIs we interact with in production.
- Created new React.js components to enable citizens from NB and MB to view their Covid-19 results online.
- Integrated a web application with Drupal's CMS to provide our customers with straightforward content authoring.

IBM Security – Security Intelligence QA (*Internship*)

Jun 2019 – Dec 2019 (7 MOS)

- Led a team initiative to address and resolve a suite of failing automated tests, significantly improving the average passing rate from 60% to greater than 90%.
- Developing automated test cases using Selenium and Jenkins to provide greater test coverage for our regression team.
- Utilized Linux to configure complex test environments, and set up deployments for teamwide testing.

Projects

Teaching Competitive Programming on YouTube:

- Solved 700+ LeetCode problems and taught 180+ YouTube tutorials using Python, SQL, and Java.
- leetcode.com/CarterMacLennan/
- youtube.com/@leetcodeWithCarter/