James Lowther

Currently attending fourth year at the University of Calgary pursuing a degree in computer science. Interested in cybersecurity and deployment of server infrastructure.

jameslowther.com
github.com/JamesLowther
linkedin.com/in/jameselowther

◆ Experience

Technical Director
Information Security Club UCalgary
Feb 2020 - present (*Volunteer*)

- Prepared, presented, and facilitated beginner and advanced live-streamed workshops at weekly club meetings in the areas of web exploitation, privilege escalation, and forensics.
- Managed front-end and back-end server infrastructure for club servers and websites.
- Created art and assets for club advertising and promotion.

infosecucalgary.ca

Operational Services
Town of Crossfield
Summer 2018-2020

- Crew member providing mowing and maintenance for town parks, facilities, and properties.
- Performed water quality tests and general maintenance of town splash park to ensure safety of town residents.

Physics 20 High School Tutor
Summer 2018-2019

- Helped students with class material and homework in the dash 1 stream of physics 20.

◆ Education

University of Calgary
BSc in Computer Science
Expected Apr 2021

- Cum. GPA: 3.9 / 4.0

WG Murdoch High School

- 2017 Class Valedictorian
- Governor General Award recipient

◆ Skills

Languages / Frameworks
Python · C++ · Java · SQLite · HTML · Tailwind CSS · React · Vue

Tools
Docker · Nginx · Git · Terraform · Shell

Services
GitHub · DigitalOcean · Google Cloud

Operating Systems
Windows · Linux · Manjaro · Debian

◆ Projects & Work

magpieCTF
Capture-the-flag hacking competition
Feb 2021

- Directed the planning and implementation of server infrastructure for the competition.
- Designed an infrastructure stack using Docker, Watchtower, Terraform, Cloudflare, Digital Ocean, and Google Cloud.
- Created CTF challenges with pre-defined vulnerabilities in the areas of web exploitation, forensics, and networking.

magpiectf.ca

Rumpus Kingdoms
Discord attack-and-defend strategy game

- Discord-driven strategy game complete with SQL database and front-end scoreboard written with Flask.
- Hosted continuously with high uptime using DigitalOcean hosting services.

github.com/JamesLowther/rumpus-kingdoms

◆ Projects & Work Cont.

jameslowther.com
Personal portfolio website
- Static site built from scratch using Gatsby.js, a React-based framework, and Tailwind CSS.
- Uses technologies such as GraphQL and image pre-processing to reduce site file size and improve performance.

jameslowther.com

◆ Competitions & Events

picoCTF 2018/2019

OverTheWire Advent Bonanza 2019

UTCTF 2020

RiceTeaCatPanda CTF 2020

Cyber-SCI Co 2020 - *2nd place*
- National competition

◆ Other Interests

Compound bow archery

Hiking

Bouldering

Piano

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◆ References
Available upon request