# Ke Li

(780) 885-0852 | kegrad2023@gmail.com | Toronto, ON, Canada damianli.com | Linkedin

### **EDUCATION**

## University of Toronto, ON, Canada

2024 – Present

Master of Engineering

- Major Area of Focus: Computing Engineering & Identity, Privacy and Security (IPS)
- Coursework: Computer Security, Cloud Computing

## University of Alberta, AB, Canada

2019 - 2023

Bachelor of Science

- Awards: Dean's Honor Roll (22-23)
- Major Area of Focus: Computing Science
- Coursework: Operating System, Computer Networks, Computer Architecture, Web Development, Mobile App Development, Interface Design, Database Management, Machine Learning, Agile Methodology

#### **CERTIFICATE**

### **Google Cybersecurity Professional Certificate**

Apr 2024

### **WORK EXPERIENCE**

### **Full Stack Student Developer (4 months)**

Jan - Apr 2023

Alberta Language Technology Lab (ALT Lab) Edmonton, Canada

- Participated as a Scrum team member in the development of a web-based visual dictionary application, utilizing technical skills in Django, React, D3.js, and Docker to provide English and Cree word definitions with the ability to expand and collapse semantic categories for improved clarity.
- Implemented front-end visualization page with the use of **React** and **D3.js**.
- Writing Dockerfile for streamlined continuous deployment.
- Used MKDocs to edit online documentation.

#### **Backend Engineer Intern (4 months)**

May - Aug 2021

Nandou Six Star System integration Co., LTD Wuhan, China

- Contributed as a member of the backend development team for the Dongfeng Pilot Autopilot project, using Django to implement interfaces.
- Deploying endpoints to the company's online server with the use of **Gunicorn** and **Nginx**.
- Experienced in data analysis, database documentation writing and maintenance.

## PROJECT EXPERIENCE (portfolio)

## Computer Security CTF blog

Jan - Apr 2024

- Binary Exploitation: | Buffer Overflow | Format String Attack | Double free Attack | ROP |
- Network Vulnerability: | XSS Attack | CSRF Attack | SQL Injection |

## Software Define Network Performance Analysis website

Mar - Apr 2024

• Visualize the SDN network, let users build their own sdn network topology and respond with the simulation performance of their own defined network. Using Mininet, React, ReactFlow, Django, AWS EC2.

# Web Application - Vocabulary Explorer <u>Documentation</u>

Jan - Apr 2023

- Participated as a Scrum team member in the development of a web-based visual dictionary application, utilizing
  technical skills in Django, React, D3.js, and Docker to provide English and Cree word definitions with the ability to
  expand and collapse semantic categories for improved clarity.
- (*Video demo*: Vocabulary Explorer )

## Web Application - Social Distribution (Github page)

Sep - Dec 2022

Contributed as a member of a four-person team to develop a web application, using Django, React, and PostgreSQL
to facilitate user engagement and social sharing, including the ability to share posts, comment and like posts, and
follow preferred users.

# Distributed System Simulation - Socket\_Server (Github page)

Nov - Dec 2022

• Individual project. Developed a multi-clients & server interaction simulation using C and socket API. Enabling the server to process and respond to multiple clients requests concurrently through multi-threading.

#### Linux OS Application - CLI-Shell (Github page)

Sep - Nov 2022

• Individual project. Developed a command-line interface using C. Implementing functionalities such as process inspection, creation, termination and resume.

## **SKILLS**

- C++, C, Python, Javascript, Java, RISC-V, X86
- Familiar with Binary Exploitation, Network Attack, HMAC, TOTP Authentication
- Django, Gunicorn, React, D3.js, ReactFlow, Git, Material UI, Ant Design
- Experienced in writing TCP-like Protocol, SDN protocol, Mininet
- Docker, Kubernetes, Nginx, AWS, GCP