Karen Xu

Victoria, BC | Vancouver, BC
03karenxu@gmail.com | (403)-874-7282

Education

University of Victoria | Victoria, BC   *Expected May 2026*

B.Sc. Computer Science, minor in Visual Arts
- Cumulative GPA: 8.22/9.0
- Awarded 4-year UVic Excellence Scholarship for high admission average (98%)
- Fall 2024 exchange semester at Yonsei University, Seoul, South Korea

Professional Experience

Automation Analyst Co-op | Government of British Columbia, Ministry of
Citizens' Services | Victoria, BC   *Jan 2025 – September 2025*
- Designed and developed automated applications to improve employee workflows and inform decision-making within the organization.
- Collaborated closely with clients and team members to gather requirements and develop robust, long-term solutions.
- Analyzed network logfiles to deliver estimates of government building utilization in response to highly urgent need to cut major spending while minimizing impact to employee lifestyles. The insights informed property management decisions contributing to over $4 million to date in gross savings.
- Piloted an application which tokenizes data from network logfiles for AI and automation purposes, increasing the speed of all dependent analytic scripts by 95%.
- Collaborated on multiple versions of a live data aggregation system for network device information. Contributions allowed for the flexible and multi-processed orchestration of automated scripts, integration of new data using APIs, and determination of truth across multiple conflicting sources, enabling efficient and reliable data retrieval for AI and automation purposes.
- Developed an automated system which determines network device connections by gathering data from provider APIs, relieving employees of the need to manually enter device connections and allowing for more efficient data retrieval for future automation team members.

Lead Instructor (formerly Assistant Instructor) | Byte Camp Education   *May 2024 – September 2024*
Society | Victoria & Vancouver, BC   *May 2023 – September 2023*
- Led groups of 5-20 students aged 8-12 per week in successfully completing coding projects, including games and apps.
- Developed a curriculum that improved student understanding, with 100% of students completing all assignments/projects within the week.
- Managed a team of 1-2 assistant instructors, coordinating lesson plans and student support for effective class management.
- Improved student engagement by 120% based on post-camp assessment by identifying key problems in course curriculum, leading to a promotion within the first 8 weeks.
- Maintained strong collaboration and communication with management, improving company growth and operational efficiency.

Projects

Automated Spotify Top 50 Playlist   *December 2024*

Python | Flask | Spotify API
- Designed and implemented a full-stack web application using Flask and Spotify's Web API to automatically generate and update playlists based on a user's most-played tracks from the past month.
- Built an API wrapper to neatly handle OAuth2 authentication, token refreshing, and user data retrieval from Spotify's endpoints.
- Included session handling and token expiration logic to ensure secure and seamless access across user sessions.

Skills

- Programming languages: Python, C, Perl, HTML, CSS
- Fluent in English, French, and spoken Mandarin