# Emily Bao

emm2718@gmail.com • https://www.emilybao.com • Bay Area, CA

## WORK EXPERIENCE

**Scotiabank**

Senior System Support Specialist (May 2021 – Present)
- Designed and automated scripts to monitor and optimize the backend environment, reducing failure rate by 15%
- Automated application patching using ansible playbooks
- Configured infrastructure environments on servers for new applications

System Support Specialist (May 2018 - May 2021)
- Designed and developed databases to track historical changes on servers for auditing
- Troubleshoot distributed network environment issues ensuring seamless user experience
- Tools and technologies: Python (win32com.client, pandas, sys, numpy, traceback, json, io), git, unix, ansible, IBM Cloud, Websphere, Dynatrace, Docker

**Queen's University**

Teaching Assistant (September 2017 – April 2018)
- (CISC-326 - Game Architecture Course) Guided students through process of game development, software architecture styles, reflexion models, and design patterns
- (CISC-325 - Human-Computer Interaction) Guided students in the design of effective user interfaces
- Tools and technologies: Java, C#, Unity, 'Understand' for code analysis

**DBAPP Security**

Python Developer (July 2017 – August 2017)
- Developed an authorization system, allowing licensed users to initiate honeypot service
- Prevented usage of expired license through system clock tampering
- Tools and technologies: Python, git, tornado

**EutroVision Inc.**

C++ Developer April 2017 – June 2017
- Created scripts that conduct block detection testing on ATM camera
- Contributed to the ATM illegal activity detection project in collaboration with the local police
- Tools and technologies: C++, git, OpenCV

**Queen's University Ecology Department**

R-Programmer (January 2016 – April 2017)
- Created R Package for collection, tracking, and curation of biological samples using custom QR codes

## PROJECTS

DJ Leap                                      http://djleap.com • https://github.com/nine2k/djleap
- Developed an interactive DJ system using Leap Motion and JavaScript, with a focus on gesture-based control. The system leverages Leap Motion's advanced hand tracking capabilities to enable precise real-time control. The right-hand controls a variety of drum beats, the left-hand controls the volume of the two songs. Integrated the project with soundcloud.com, and implemented a backend algorithm to intelligently match the beats of the two selected tracks, ensuring a seamless and harmonious audio experience. Tools and technologies: Leap Motion, HTML, CSS, JavaScript

## EDUCATION

Queen's University
BS Computer Science Honors

## AWARDS

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|---|---|
| 2017 March – **Second Place Team** | Start-up Development Competition |
| 2016 December – **First Place Team** | Limestone Local Hack Day |
| 2008 – **First Place** | Gauss Mathematics Contest, University of Waterloo |
| 2007 – **First Place** | Story Telling Competition, Huamao International School |