

# ARIEL LIU

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[Website](#) • [GitHub](#) • [LinkedIn](#) • [LeetCode](#)

## SUMMARY

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- Well-versed in implementing various **machine learning projects**, especially Computer Vision solutions utilizing **Python**
- Experienced in handling roles and responsibilities of various positions alongside full-time education, leading to the development of excellent **time management**, **leadership**, **problem-solving**, and **communication** skills
- Familiar with **learning new technologies and tools** on a tight timeline to meet business needs and client requirements

## TECHNICAL SKILLS

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**Programming Languages:** Python, C#, Java, C++, JavaScript

**Scripting Languages:** HTML, CSS, JSON

**Database:** PostgreSQL

**Software Tools:** Jupyter Notebook, PyCharm, Visual Studio, VSCode, Eclipse, Apache NetBeans, Microsoft Office

**Version Control Tools:** Git, GitHub, Bitbucket

**Other Tools:** Figma, PowerDirector, Audacity, Unity, Arduino, Adobe Suite (Illustrator, Photoshop, Premiere Pro)

## EDUCATION

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**Bachelor of Computer Science**

Aug 2022 - Present

[University of Toronto \(Toronto, Ontario\)](#)

- *Relevant Coursework:* Python Programming, Object Oriented Program Design, Data structures and Algorithms

Available for internship beginning May 2023

## PROFESSIONAL EXPERIENCE

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**Graphic Designer**

Jun 2021 - Sep 2021

[CryptoChicks Blockchain Education](#)

- Coordinated with the Marketing, Social Media, and Business teams to plan and execute a campaign to boost social engagement
- Designed visual content for the website, Instagram, blog posts, and internal communications

- Wrote and proofread social media posts, website copy, and blog posts
- Worked in conjunction with the Web Development Team to redesign various parts of the CryptoChicks Academy website
- Been a part of various design decisions, planning sessions, and timeline estimates
- Ensured the on-time delivery of deliverables while making the quality of the end result a prerequisite

## Python Programming Instructor

Nov 2020 - Jun 2021

### CanFly Education

- Fostered an early interest in programming within youth
- Mentored and instructed students on various programming concepts from basic to advanced
- Maintained discipline within the classroom and methodically provided additional resources for learning beyond the classroom
- Designed and set curriculum objectives to ensure students would end the course with a strong proficiency in Python and a new-found passion for technology

## Event Organizer and Teen Ambassador

Sept 2019 - Sept 2020

### Canada Learning Code

- Helped orchestrate and plan various Canada Learning Code events and workshops across Canada, teaching skills ranging from website development to AI
- Promoting digital literacy across Canada. Inspiring Canadians, especially minorities, to learn the skills needed to become critical participants in the future of technology

## PROJECTS

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### Identifying Food Using Computer Vision

Sep 2021

- Programmed and trained the AI model to an accuracy of ~90% using **Keras** (Python) in Jupyter Notebooks, and applied **Transfer Learning** using the **InceptionV3** model
- Helped design and develop the app UI in **Flutter**
- Integrated the app with the **TensorFlow Lite** backend

### Identifying COVID-19 Induced Pneumonia with AI

Apr 2022

- Developed and trained a **Convolutional Neural Network (CNN)** using **Transfer Learning** with **Keras** and the **VGG16** model
- The CNN was able to differentiate COVID-19 induced pneumonia from viral or bacterial induced pneumonia with up to **85% accuracy** from chest X-ray data

### Employee Management System

Oct 2023

- Designed and developed the Employee Management System from scratch in **Apache NetBeans** and **Eclipse IDE** (using **Java**)

## CERTIFICATIONS

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<a href="#">Responsive Web Design</a> , freeCodeCamp	Aug 2022
<a href="#">Computer Vision</a> , Kaggle	Sep 2021
<a href="#">Introduction to AI Ethics</a> , Kaggle	Sep 2021
<a href="#">Introduction to Machine Learning</a> , Kaggle	Aug 2021
<a href="#">Intermediate Machine Learning</a> , Kaggle	Aug 2021
<a href="#">Introduction to Deep Learning</a> , Kaggle	Aug 2021
<a href="#">Python</a> , Kaggle	Aug 2021

## EXTRA-CURRICULAR ACTIVITIES

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- Presented on **Computer Vision** within a **General Assembly** global livestream on data science, machine learning, and neural networks
- Founded the **Woodlands Hack Club** and hosted **Hack the Woodz**, a hackathon with ~150 attendees ranging from experienced to first-time hackers
- Team leader for **FraserHacks 2019**. **Won the Best Data/Infosec hack** for our machine learning project on predicting pancreatic cancer
- **Winner of SF Hacks Best Beginner Hack**. Built a course platform using blockchain to lower costs and allow for a more direct connection from instructor to students
- **Global Finalist of Destination Imagination (DI)**, a competition with a strong focus on innovation, leadership, and problem solving under stress
- Robotics team leader in **FLL Regionals**, a robotics championship held by FIRST Robotics Canada. Winning *1st place (2015)*, *2nd place (2016)*, and *1st place (2017)*
- Team leader for the **Technovation App Development Competition**, winning *1st place (2018)* and *3rd place (2019)*

## OTHER SKILLSETS

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### Languages:

- English ([Native](#))
- Mandarin Chinese ([Professional working proficiency](#))

### Sport Experience:

- Competitive Synchronized Swimming ([5 years](#))
  - Competed in the **2018 Ontario Winter Games**
- Competitive Rhythmic Gymnastics ([7 years](#))

## APPENDIX

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### Key Links

Personal Website: <https://arielycliu.github.io/>

GitHub: <https://github.com/arielycliu>

LinkedIn: <https://www.linkedin.com/in/arielycliu/>

### Previous Works

Publications: <https://medium.com/@arielycliu>

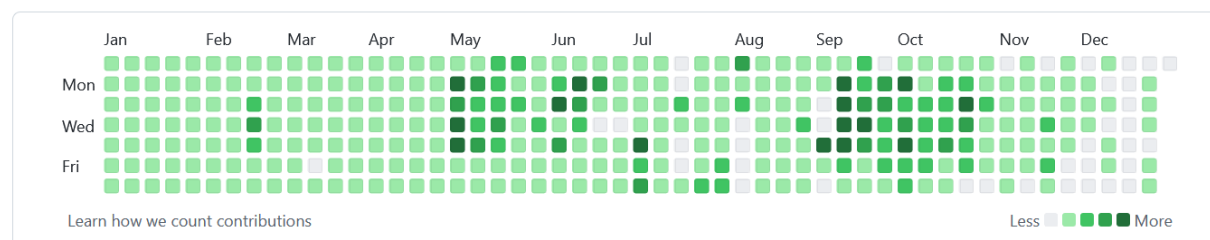
Hackathon Portfolio: <https://devpost.com/arielycliu>

Programming Problems: <https://leetcode.com/arielycliu/>

### Recent GitHub Activity

3,064 contributions in the last year

Contribution settings ▼



### Recent LeetCode Activity

