# **Arthur Gao**

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## **Education:**

## University of Toronto St. George 2024 Campus

Honours Bachelor of Science Specializing in Computer Science with Focus in Human-Computer Interaction

### **Strathcona Hight School**

2020

Graduated honours with distinction

Received school and district awards in career and life pathways

# **Experience:**

### **Director of Video**

2021

National Stiltwalkers of Canada

Directed and produced video for two live shows: Bamcussion, and Rocko and Nakota Tales from the Land, viewed live by over 5000 people.

## **Computer Science Tutor**

2019 - 2021

Zuo Education

Taught middle school students the basics of computer science using Java and Processing.

Encouraged and advocated for STEM education in the community.

# Intern – Highschool Internship Program

Summer 2019

and 2020

University of Alberta

Worked on a team to assist in the research of the paper Relocating Sharing Bicycles to Reduce Carbon Emissions. Assisted peers in numerous debugging scenarios. Created a highly praised research poster summarizing the findings of the studies.

Assisted in the development and authored Labs for the course CMPUT201 at the U of A  $\,$ 

# **Head of Production - Media**

2018 - 2020

#### **Team**

Strathcona High School

Led and coordinated setup, production and teardown of many successful live events as well as overseeing the production of recap videos

Greatly increase the school's production quality in sporting events with custom software installations

Mentored new members with the basics of cinematography, planning, and editing

Completed countless videos on strict and tight deadlines, all to great praise.

# References:

Dr. Guohui Lin – guohui.lin@ualberta.ca

Mr. Greg Forsyth - greg.forsyth@epsb.ca

Mr. Randall Fraser = (email here)

## **Technical Skills:**

Strong programmer in many OOP languages including Java, and Python.

Experience in other programming and scripting languages including C, HTML, CSS, R, Processing, Kotlin, Dart, Markdown, and LaTeX.

Experience in Flutter cross-platform framework

Strong experience in Final Cut Pro X and Adobe Creative Cloud apps including Lightroom, Illustrator, InDesign, and Photoshop.

# **Projects:**

### kard - CSC207

Led the development of the kard app for the CSC207 course at the UofT.

Built from the ground up a SQLite database, Java Jump server, Java HTTP client, and Flutter Android and iOS app.

Work highly praised by professors, TAs, and classmates.

#### **Bamcussion**

Led the development of the chroma key tracking system utilizing a mobile camera on a gimbal and Unreal Engine 5 to live render a dynamic background for greenscreen video. Directed cinematography including camera placement, switching, and configuration. Connected Unreal Engine feed with Blackmagic API to automatically control background feed when different cameras are toggled.

#### **Scona Scoreboard Software**

Designed and developed an interface between the existing gym scoreboard and broadcast computer.

Created front-end graphic to interpret and display the scoreboard for live viewers.

# Scona Replay Software – Now HyperActive

Developed a back-end tool to communicate with Blackmagic Hypedecks to allow for instant replays on live broadcasts at sports events.

Used existing API tools to develop a effective, easy to use front end, custom built solution.