

Ness Chu

// Computer Science + Biology Major

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[GitHub](#) | [itch.io](#) | [LinkedIn](#)

> Education

McGill University (B.Sc. Computer Science/Biology Joint Major)

2017-2022

- ↳ **Key Skills:** Object Oriented -> *Java, C#, C++*
Functional -> *Python, R*
Web Development -> *HTML, CSS, JS, TS*
Version Control -> *Git, Perforce*
Design -> *Adobe PS, Figma*
Game Development -> *Unity, UE4, Blender*
- ↳ **Related Courses:** Software Design
Data structures
Modern Computer Games
- ↳ **Spoken Languages:** English (fluent)
French (working)
Mandarin (working)

> Work History

Ubisoft Montreal (Tools Programming Intern)

May-August 2021

- ↳ Designed and integrated reusable **LitElement web components** in a full-stack context.
- ↳ Followed **performance** best practices when developing, such as asynchronous coding and reducing the volume of server calls.
- ↳ Created customizable **JSON configuration** to generate HTML content from existing components.
- ↳ Used and debugged **Docker** containers to locally test applications.
- ↳ Resolved **JIRA** issues in **Agile sprints** to address user requests and meet bi-weekly deadlines.

Dalla Lana School of Public Health, UofT (Student Research Trainee)

May-August 2019

- ↳ Processed **large datasets** of respiratory measurements using **Excel**, generated by **SCIREQ flexiWare**.
- ↳ Conducted **detail-oriented tasks** such as tissue slicing and mammalian cell imaging, processing ~300 lung slices across 12 murine specimens.

> Projects

The Third Law (Ubisoft Game Lab Competition Project)

January-March 2021

- A physics-driven multiplayer platforming game prototype, developed in a team of 8.
- ↳ Implemented **Cinemachine camera** to dynamically follow two independently moving players.
- ↳ Added **UI feedback** for player movement direction and off-screen pick-up items.
- ↳ Created **contextual ping system** using **raycasts** from camera to objects through mouse position.

Supporting ProtestS (Google Software Product Sprint (SPS) Project)

June-August 2020

- A web app platform for communication between protest organizers and participants, developed in a team of 4.
- ↳ Created website mockups and design documents using **Figma** to prototype site UI and UX.
- ↳ Collaboratively constructed and published a live website from mockups using **HTML/CSS/JavaScript**.
- ↳ Implemented the **Google Maps API**, storing user input in **Google Cloud Datastore** in JSON format and displaying the stored data in an interactive map on the website.
- ↳ Implemented security measures requiring verification of unique access tokens to edit existing events.

"Bad" time Stories (Ubisoft Game Lab Competition Project)

January-March 2020

- A procedurally-generated multiplayer combat game prototype, developed in a team of 8.
- ↳ Created **design documents** to scope project and develop key macro- and micro- game loops.
- ↳ Researched and evaluated procedural generation techniques including **L-Systems** and **UnAngband**.
- ↳ Prototyped levels with default assets in **Unreal Engine** using **Blueprints Visual Scripting**.
- ↳ Wrote an **18-page report** of project, explaining **design choices, technical execution, and testing**.

> Extracurriculars

McGill Game Development Student Society

President

2020-2021

- ↳ **Coordinated a team of 12** executives in organizing events such as workshops, talks, and hackathons, to build a community for student game developers at McGill University.
- ↳ **Presented** club achievements and goals to internal and external sponsors to **secure annual sponsorships**.

McGame Jam (Hackathon) Head Organizer

2018-2020

- ↳ Oversaw sponsor outreach, ticket sales, public advertisement, venue planning, and volunteer organization of two **48-hour hackathons (150+ attendees each)**.