

# Nicholas Chew

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## Education

### University of Waterloo

Waterloo, Canada

BACHELOR OF SOFTWARE ENGINEERING, HONORS

2022 - Present

- President's Scholarship of Distinction

## Skills

**Languages** JavaScript, HTML/CSS, Java, Python, C, C++

**Technologies** React, Node.js, PostgreSQL, Express, Redis, Socket.io, Git, Google Cloud, Microsoft Azure

## Experience

### Rivalry

Toronto, Canada

SOFTWARE DEVELOPER INTERN

Sep 2021 - Jan 2022

- Developed a Discord Bot that increased E-sports information retrieval times by ~**350%**
- Built in-app commands to display upcoming E-sports matches with team statistics using the Rivalry API, JavaScript, Discord.js and Axios.
- Prototyped an authentication system linking Discord accounts to Rivalry alongside a MySQL database to save user information.
- Utilized GitHub and the Twelve-Factor App lifecycle to integrate my work with industry software standards.

### RHHS Student Council

Richmond Hill, Canada

WEBMASTER

Jun 2021 - Jun 2022

- Maintained the Richmond Hill High School Student Council website using TypeScript, React and Google Cloud Functions.
- Developed an updated front-end design and clean user experience that drove up site traffic by ~**410%**.
- Collaborated with other student council departments and school clubs to ensure their information was precisely displayed.

### Code Ninjas

Vaughan, Canada

CODING INSTRUCTOR

Oct 2020 - Aug 2021

- Prepared thirty minute weekly coding sessions for five students aged 8 to 13 over Zoom video calls.
- Taught students fundamental programming concepts such as variables, conditionals, loops, and functions through game development using Scratch.
- Led lessons for advanced students teaching object oriented concepts using the MakeCode Arcade platform.
- Resolved all inquiries about class information with parents promptly and professionally.

## Projects

### SharpChat

REACT, POSTGRESQL, EXPRESS, REDIS, SOCKET.IO

Aug 2022

- Programmed a chatting web app using React, ChakraUI, and Socket.io allowing for quick and simple communication between friends.
- Constructed a friending and account system with authentication using PostgreSQL databases.
- Utilized Redis for effective data storage to ensure user sessions and messages were persistent.

### RadomirChess

JAVA, GIT, AWS, UX DESIGN

Jan 2022

- Developed a chess app built in Java Swing featuring a chess logic engine, server system, account system, and a customizable user interface.
- Refined the lobby system allowing users to create public and private playing rooms using socket communication.

### Origami Portfolio

HTML/CSS, JAVASCRIPT

Jun 2021

- Created a portfolio website containing previously folded origami models from 2015 - 2021.