

# Ghanan Jeevaretnam

## Systems Design Engineering

 [www.github.com/ghanan-jeeva](https://www.github.com/ghanan-jeeva)  [ghananjeeva.com](mailto:ghananjeeva.com)  [jeeva.ghanan@gmail.com](mailto:jeeva.ghanan@gmail.com)  [linkedin/in/ghanan-jeeva](https://linkedin/in/ghanan-jeeva)

### SKILLS

**Languages:** Java, JavaScript,  
SQL, Python,  
C++, Arduino  
HTML, CSS, C#

**Tools:** Unity, Visual Studio  
Visual Studio Code,

### AWARDS

FRC 2018 Worlds  
Championship Semi-Finalists

FRC 2018 Ontario  
Provincial Semi-Finalists

FRC 2019 STEMley Cup  
International Champions

### EDUCATION

University of Waterloo  
B.A.Sc. **Systems Design  
Engineering '24**

### COURSEWORK

Digital Computation(C++),  
Data Structures &  
Algorithms(C++),  
Human Factors in Design

### INTERESTS

Tennis, Soccer,  
Travelling, Sketching,  
Reading, Photography

### EXPERIENCE

#### WEB DEVELOPER | SPRINGBAY STUDIO

*Jan - May 2020 | HTML, CSS, JavaScript*

- Created a "CO2 calculator" alongside a leaderboard system to make **API calls** to an AWS back-end database shared between the iBiome app and website in order to track user's CO2 daily consumption
- Programmed the complete front end of the company's promotional website to create a sleek, user friendly experience

#### MOBILE GAME DEVELOPER | SPRINGBAY STUDIO

*Jan - May 2020 | Unity, C#*

*[apps.apple.com/us/app/ibiome-arctic-50th-earth-day/id1476091149](https://apps.apple.com/us/app/ibiome-arctic-50th-earth-day/id1476091149)*

- Led development for major features of iBiome app using **object-oriented** programming resulting in "**App of The Day**" placement on **Apple Store**
- Investigated and fixed long-standing bugs to improve user playability and appeal to customers like Google for the app to be placed on the **Google Classroom platform**
- Refactored code and **revamped asset loading** to significantly improve performance of the game on mobile devices

#### FIRST ROBOTICS STRATEGY & SCOUTING TEAM EXECUTIVE

*SEPT 2018 - JUN 2019*

- Managed and led **45+ students** at FRC competitions to collect large amounts of data both accurately and efficiently leading to multiple finals & semi-finals appearances

### PERSONAL PROJECTS

#### EMPLOYEE MANAGEMENT SYSTEM | JAVA

*SEPT 2018 - JUN 2019 | JAVA, NETBEANS*

*[github.com/ghanan-jeeva/Employee-Management-System](https://github.com/ghanan-jeeva/Employee-Management-System)*

- Programmed an **object-oriented** database using a NetBeans-GUI to add, edit, and remove user-inputted employee info in a **hash table**
- Persisted user data by **caching user properties to a local file**

#### PERSONAL PORTFOLIO WEBSITE | HTML, CSS

*SEPT 2018 - JUN 2019 | HTML, CSS, BOOTSTRAP*

*[ghananjeeva.com](https://ghananjeeva.com)*

- Developed website **from scratch** using HTML and CSS to highlight past projects and experiences using Visual Studio Code
- Implemented **responsive design** using Bootstrap