

Alexander Ryu

📧 alexryu.ca | ✉ ayryu@uwaterloo.ca | 📄 github.com/ayryu

Languages

Java, Python, JavaScript

Frameworks + Technologies

Spring Boot, Flask, React, Node.js, Express, Git, MySQL

Projects

Bekan

JavaScript, React, Node.js, Express, Material-UI, Heroku

bekan.herokuapp.com

- Created a web app for discussing community issues and aggregating evidence-based solutions
- Structured the frontend with React to use modular components and state/effect hooks in order to manage state and to communicate with the server - designed with Material-UI
- Built the backend server using Node.js/Express to handle HTTP requests and deployed via Heroku

Kezuru

Java, Spring Boot, Hibernate, Bootstrap, MySQL

github.com/ayryu/Kezuru

- Developed a Spring Boot app for users to create posts about technique-driven cooking methods
- Leveraged the Hibernate framework for MySQL by using ORM annotations for CRUD operations
- Designed around the MVC pattern, utilized annotations for dependency injection, added API endpoints for processing requests, and used Maven for dependency management

Pokemon Battle Data

Python, Flask, BeautifulSoup, JavaScript

github.com/ayryu/PBD

- Created a Python web app for obtaining stats of Pokemon seen frequently in the OU metagame
- Utilized the BeautifulSoup library to automate DOM traversal and for data extraction of stats/images, and used Flask for streamlining server-side processing of HTTP requests
- Rendered data using JavaScript via AJAX server requests and utilized templating with Jinja2

Smash Tournament Winner

Python, Flask, HTML, CSS

github.com/ayryu/TourneyW

- Developed a Python app using Flask for retrieving frame data of playable Smash characters
- Leveraged the Kurogane Hammer API for obtaining over 400+ attacks worth of information
- Retrieved JSON object data and rendered images and attack frame data for over 70+ characters

Education

University of Waterloo

Bachelor of Science - Honours Biology (Psychology Minor)

[Waterloo, Ontario](#)

Graduation: July 2020

Work Experience

TJX Canada

Store Associate

[Waterloo, Ontario](#)

Feb. 2018 - April 2020

- Restructured the materials system, developed/implemented automatic procedures, reducing queue response times and improving team coordination for up to 6+ concurrent associates

Johnson & Johnson Inc. Canada

Research Assistant - R&D Technical Writer Co-op

[Guelph, Ontario](#)

Sept. 2015 - Dec. 2015

- Prepared development reports detailing stages in the product development cycle ranging from a product's chemical formulation to environmental impact assessments for OTC medications