### JEFFREY JOHNSON

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#### **EDUCATION**

#### Oswego, NY

# State University of New York (SUNY) College at Oswego

Aug. 2016 – Dec. 2020

• B.A in Computer Science, Dec. 2020

#### LANGUAGES AND TECHNOLOGIES

- Languages: Java, HTML, CSS, JavaScript, Python, Golang;
- Frameworks: Java EE, Bootstrap 4, Spark Java, Dropwizard, Java Swing;
- Databases/Servers: MySQL, Tomcat 8;
- Cloud Software: Docker, AWS S3, DynamoDb, EC2, ECS, CodeDeploy, CodeBuild
- Version Control: Git, GitHub;
- IDES: NetBeans, IntelliJ IDEA, Visual Studio Code;
- Operating Systems: Ubuntu, macOS, Windows 10;

#### **PROJECTS**

#### JBento (2019- Present)

- Designed and created a static website using Bootstrap 4 to sell instrumental music licenses and sample packs.
- Optimized website to lower the average page loading speed by 25 percent.
- Utilized Git, GitHub and CPanel for version control and automatic deployment.
- Set up Google Analytics to track sales conversions and user traffic sources.
- Ran Google Ads campaigns which resulted in **42,700** impressions and **10,000** YouTube views to increase brand awareness and sales.

#### SELECTED COURSEWORK

#### **Web Services (Spring 2018)**

#### SneakerBeast

- Designed a RESTful API for a beverage store, allowing an authenticated user CRUD permissions.
- Utilized design patterns such as MVC (Model View Controller) and DAO (Data Access Object) to minimize repetitive code.
- Used Postman to test API endpoints.
- Configured the application to consume and produce JSON data.
- Created SQL tables using MySQL to store user credentials, sneaker data and API tokens.

#### **Software Deployment (Fall 2020)**

#### SneakerBeast

- Designed an API that got information from a given YouTube Channel ID and implemented it in Go
- Built and deployed Docker images to Docker containers on a hosted Amazon EC2 instance
- Reduced the image footprint by 90 percent (200 MB- 10 MB) by implementing a Docker scratch build
- Sanitized url query parameters to ensure the system would be safe from XSS attacks
- Utilized DynamoDb to create a NoSQL database, that stored channel data
- Utilized AWS S3 to host a static website
- Used AWS CodeDeploy and CodeBuild to automatically build and deploy Go source code hosted on GitHub

#### **Software Engineering (Fall 2017)**

#### GUIGoPiGo

- Worked in a 3 person team to design a web GUI client for a robot using HTML, CSS, and JavaScript.
- Created a JQuery function that passed location data from the client to the server hosted on the robot.
- Created a waypoint tracking system that changed location on the GUI, relative to the robot's physical position.

- Used the Linux terminal to manage files hosted on the robot, run Python code, and install packages.
- Contributed to the software requirement specifications document (SRS) that described the goals and purpose of the project.
- Created UML diagrams to represent the system under development (class, sequence, and activity diagrams).

## Data Structures and Algorithmns (Fall 2020)

- (Fall 2020)
  Developed an application that compares all of the Wikipedia links on a page to derive the move relevant link.
- Used JSoup to scrape Wikipedia page for links to other Wikipedia pages.
- Implemented a separate-chaining HashTable to store word information (term frequency, word length, document word count).
- Implemented a term frequency—inverse document frequency (TD-IDF) statistic to obtain the URL that is most relevant to the original Wikipedia page.
- Designed a Java Swing GUI that displayed the comparison metrics.
- Created an application that parsed Grocery information for customers, and returned a list of items that were likely purchased together
- Utilized the Apriori Algorithm to create frequent itemsets and association rules between frequent items.
- Implemented a image segmentation algorithm that isolated regions of an picture, and colors similar regions

#### PERSONAL INTERESTS

- Music Production (Recording, Composition)
- · Graphic Design

- Sneakers
- Basketball