

## Spencer Gritton

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### EDUCATION

#### The University of Iowa

**GPA: 3.92/4.00**

Bachelor of Arts in Computer Science and Bachelor of Business Administration in Finance

**May 2020**

### SKILLS & COURSEWORK

**Languages:** Java, Python, JavaScript, C, Bash, Kotlin, Swift, HTML5, CSS3

**Technologies:** React.js, Vue.js, Play Framework, Flask, Node, Docker, CI/CD, JUnit, Jest, Hibernate, AWS, Git

**Courses:** Data Structures, Computer Organization, Operating Systems, Computer Security, Discrete Structures

### PROFESSIONAL EXPERIENCE

#### University of Iowa - Admin Information Systems

Student Software Developer

**September 2018 – Present**

- Currently using Play Framework to create a flexible data pipeline allowing users to define custom batch jobs, schedule them, and receive live updates via WebSockets on job progress as pipelines run.
- Created a RESTful API using Spark Java Framework for worker nodes to receive updates on pipeline job activity.
- Wrote Slack API integration to display additional GitLab information to developers using Slack groups.
- Implemented GitLab CI/CD by writing CloudFormation scripts to auto-scale continuous integration servers based on demand, decreasing CI/CD costs by up to 70%.

#### John Deere Financial

Software Developer Intern

**May 2019 – August 2019**

- Rewrote legacy application using React.js using object oriented components to maximize extensibility.
- Used JavaScript and Axios to query a RESTful API to display real-time backend updates to users.
- Used TDD with Jest and Enzyme to ensure project was free of defects and achieved 99% test coverage.

#### University of Iowa - Computer Science Department

Private Tutor

**August 2018 – December 2018**

- Assisted the student in implementing foundational data structures including: Maps, Trees, and Stacks in Java.
- Created and debugged interactive algorithmic problems with the student to simulate a test taking experience.

#### Athene USA

Finance Information Systems Intern

**May 2018 – August 2018**

- Completed review of vendor system to reclaim unused licenses with an estimated value of \$36,924 annually.
- Designed and built out workflow management system for the Finance Information Systems team using JIRA.

### PROJECTS

#### Personal Project, S'music

**October 2019 – Present**

- Currently learning React Native, TensorFlow, and Spotify API to create an iOS app that classifies a users picture to a spotify genre and generates a playlist of music that may be of interest to them.

#### CS:2820:Object Oriented Software, Tic-Tac-Toe (GitHub)

**October 2018 – December 2018**

- Used Kotlin and JavaFX GUI framework to create a Tic-Tac-Toe game with support for: multiple game types, piece customization, game-driven events, and the option to play against a computer or a human player.

#### CS:2230:Data Structures, Semantic Similarity (GitHub)

**November 2017 – December 2017**

- Implemented cosine similarity, euclidean distance, and k-means clustering algorithms in Java to compare the semantic similarity of input text to known text. Resulted in runtime 400% faster than project specifications.

#### Personal Project, iOS Toilet Locator App (GitHub)

**March 2017 – July 2017**

- Created an iOS application that interactively locates public toilets near the user by implementing Apple Maps APIs, Apple CoreLocation APIs, and iOS gesture recognizers in Swift.