Greenville, SC
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github.com/ashsobeck

# Ashton Sobeck

## Education

**M.S. Computer Science** **2022**
*Clemson University* *GPA: 3.75*

**B.S. Computer Science** **2018 - 2021**
*Clemson University* *GPA: 3.90*

## Experience

**Software Engineer Intern** **Jan 2022 - Present**
*Workiva*

- Created a robust performance testing framework that enhanced knowledge of the system's performance and led to a 33% decrease in query execution time.
- Contributed to both frontend and backend features that provided our customers with an even better experience.
- **Utilized:** Java, Dart, Python, SpringBoot, Locust Load Testing

**Cloud Engineer Intern** **May 2020 - May 2021 & Aug 2021 - Dec 2021**
*Clemson CCIT*

- Utilized AWS CloudFormation, Lambda and scripts to help support the Atlassian suite to maximize availability and minimize costs.
- Switched the QA environment to Spot Instances resulting in 25% monthly costs savings.
- **Utilized:** AWS, Lambda, CloudFormation, Python

**DevOps Engineer Intern** **Jun 2021 - Aug 2021**
*Infor*

- Automated manual processes resulting in a time reduction of 70% in deploying our software for customers.
- Replicated existing architecture into CloudFormation templates for replicating across different environments.
- **Utilized:** AWS, Lambda, CloudFormation, Python

**Software Engineer Intern** **May 2020 - Oct 2020**
*NIWC PAC*

- Learned fundamental principles of frontend, backend, and API development.
- Engaged in pair programming and other AGILE practices.
- **Utilized:** ReactJS, ChakraUI, Java, SpringBoot

## Projects

**Can PCA Reduce Dataset Size While Keeping Great CNN Performance?**

- We wanted to see if applying PCA to the CIFAR10 dataset as an input to a CNN would produce satisfactory results while keeping the dataset size low
- We used **Python** and **Keras** to create, train, and visualize the results from our models.
- We found that compressing 81.25% (6 of 32 principal components) of the data resulted in on par or just below image classification performance of using the full dataset.

**Melbourne Pedestrian Density**

- Utilizing **deck.gl** and **d3.js**, we visualized the pedestrian density of Melbourne, Australia to show the busiest areas of the city at different times of the day.
- We gave the user the option to compare different streets of Melbourne in which a comparative chart graphic would populate on the user's screen.

## Skills

**Languages and Frameworks**: Dart, Java, ReactJS, Remix, TypeScript, YAML, Python, C/C++
**Other Skills**: AWS, AGILE, Git, Infrastructure as Code, Communication, Mentoring, APIs