

Education

M.S. Computer Science <i>Clemson University</i>	2022 GPA: 3.75
B.S. Computer Science <i>Clemson University</i>	2018 - 2021 GPA: 3.90

Skills

Languages and Frameworks: Dart, Java, ReactJS, Remix, TypeScript, YAML, C/C++

Technologies and Ideologies: AWS, AGILE, Git, Infrastructure as Code

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.

Sobeck.dev

- Created using the Remix framework, this hosts my portfolio and other projects I have.

Experience

Intern - Software Engineer Jan 2022 - Present *Workiva*

- Created a robust performance testing framework that enhanced knowledge of changes to the system's performance.
- Took on frontend and backend stories to increase my knowledge of the product.

Cloud Intern May 2020 - December 2021 *Clemson CCIT*

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

DevOps Intern June 2021 - August 2021 *Infor*

- Automated manual processes resulting in a time reduction of 70%.
- Replicated existing architecture into CloudFormation templates.

Full Stack Developer Intern May 2020 - October 2020 *NIWC PAC*

- Learned fundamental principles of frontend, backend, and API development.
- Engaged in pair programming and other AGILE practices.