# Samuel Scott Merchant

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### EDUCATION

**Bachelor of Science,** December 2022 The University of Alabama, Tuscaloosa, AL Major: Mathematics Minor: Computing Technology & Applications

Concentration: Statistics and Optimization

## **CAMPUS INVOLVEMENT**

Million Dollar Band, Drumline, August 2017 - May 2020 University Symphonic Band, 3<sup>rd</sup> Chair Percussion, August 2017 – December 2017

#### **RELEVANT EXPERIENCE**

Intern Engineer, May 2019 - August 2019 Bolzoni Auramo Inc., Sulligent, AL

- Pinpointed quality issues in production lines by implementing Manufacturing Execution System (MES) quality control software in assembly stations.
- Performed analysis of assembly line data using SQL and Excel to determine usage of MES every shift.
- Automatically updated inventory database by integrating with MES workstations.
- Gave presentations to coworkers on how to operate the MES software.
- Modeled parts to be used in various projects using Sketchup 3D Design software.
- Regular maintenance and testing of power tools in product assembly lines to ensure production was always moving.

#### ADDITIONAL EXPERIENCE

Drumline Instructor, August 2020 Lamar County High School, Vernon, AL

Drumline Instructor, August 2018, August 2017 Sulligent High School, Sulligent, AL

#### SKILLS

- Python (Pandas, NumPy, Matplotlib, PyTorch, BeautifulSoup)
- SQL, Microsoft SQL Server, MySQL
- JavaScript, Node.js
- HTML/CSS
- Machine Learning (AWS SageMaker, K-nearest Classification, Regression, Predictive Modeling)
- Microsoft Excel (Macros, VLOOKUP, PivotTables)
- Data Visualization (Tableau, PowerBI)
- Data Collection and Cleaning
- Amazon Web Services (AWS)
- Experience with Windows, Mac, and Linux operating systems

## PROJECTS

Twitter Bot | JavaScript, Heroku

- Automatically reports the current top 5 Formula 1 rankings every week.
- JavaScript was used to write the bot and to scrape data from ESPN.
- Connected with the Twitter API and deployed using Heroku cloud application platform.

## COVID Data Analysis | SQL, Excel, Tableau

- Created interactive visualizations in Tableau to show vaccine effectiveness.
- Prepped CDC data using SQL to display COVID rates by state.

## **iFixit Project**

- Created an online step-by-step guide on how repair a laptop with 3 other collaborators.
- Gave visual documentation and wrote technical summaries of the process to upload to the iFixit website.