Teddie Swize

Auburn, Alabama

✉ teddieswize@outlook.com 📞 (337) 579-7897 in [LinkedIn](#) ⌗ [GitHub](#)

EDUCATION

Georgia Institute of Technology   **Remote / Atlanta, Georgia**
Master of Science, Analytics   Aug 2024 – Aug 2026 (Expected)

- **Courses**: Computing for Data Analysis (Python), Business Fundamentals for Analytics

Louisiana State University   **Baton Rouge, Louisiana**
Bachelor of Science, Computer Science (Data Science & Analytics) - 3.86 GPA   Jan 2021 – Dec 2023
Minor, Mathematics

- **Courses**: Machine Learning, Statistics, Probability, Deep Learning, Artificial Intelligence, Big Data Technologies, Data Structures, Optimization, Database Management, Linear Algebra, Numerical Analysis

United States Coast Guard Academy   **New London, Connecticut**
Coursework in Operations Research & Computer Analysis   Jul 2018 – May 2020

WORK EXPERIENCE

Applied Research Associates   **Baton Rouge, Louisiana**
Backend Software Engineering & Deep Learning Intern   Sep 2023 – Dec 2023

- Spearheaded the development of a reverse image search feature for the Department of Homeland Security (DHS)
- Implemented a Convolutional Neural Network (CNN) under strict security constraints, improving accuracy of label detection by 70%
- Developed software solutions using Entity Framework Core with C# to support front-end data requirements
- Wrote complex SQL queries on multiple databases to extract meaningful data, leveraging advanced data-engineering skills
- Conducted unit and integration testing to ensure software reliability and performance, achieving a 95% pass rate
- Utilized Agile development practices through the use of Jira and daily stand ups to ensure consistent progress and flexibility

Seeq Corporation   **Remote / Seattle, Washington**
Analytics Engineering & Machine Learning Intern   Jun 2023 – Aug 2023

- Transcribed expectations of pharmaceutical client into technical requirements to effectively analyze product data
- Performed statistical analyses on batch time series data to extract actionable insights into the manufacturing processes and health of products, identifying 5 key improvement areas
- Developed visualizations such as predictive models, exception summary tables, and control charts within Seeq Software to easily determine the health of the products, reducing client analysis time by 80% and enhancing data visualization capabilities
- Launched the research and implementation of a machine learning implicit recommendation system add-on to suggest related datasets to users of the software, a feature that would increase user productivity by 20%
- Collaborated with the Analytics Engineering and Software Development teams on unique projects, mastering schedule coordination and effective, cross-disciplinary communication
- Utilized Seeq Workbench, Organizer, and Data Lab to customize client solutions to specific needs and provide long-term support

COVID-19 Research (University of Louisiana & Louisiana State University)   **Baton Rouge, Louisiana**
Lead Programmer (MATLAB)   Jun 2022 – Nov 2022

- Presented findings at the SIAM Texas-Louisiana Section in Houston, Texas to over 100 academic professionals
- Fitted COVID-19 datasets from Germany and the NBA to differential equations predicting viral load and immunological response
- Analyzed results of model fits to determine variations in parameters according to expected outcomes in the research
- Used Mathematica to estimate parameters to produce best fits and crosscheck plots, reducing error margins by 20%
- Wrote detailed documentation on findings with supporting code to report to supervising professors
- Quickly researched and understood complex virological mathematical research to gain coding intuition

SKILLS

- **Programming Languages**: Python, Java, MATLAB, C#, R, Typst
- **Databases**: MySQL, PostgreSQL, Microsoft SQL Server, NoSQL, Firebase
- **Data Analytics**: NumPy, Pandas, SciPy, Databricks, Jupyter Notebook, Quarto, RStudio, Microsoft Excel, Seeq Analytics Software
- **Big Data Technologies**: Apache Spark, Apache Hadoop
- **Machine Learning Frameworks**: TensorFlow & Keras, PyTorch, scikit-learn, Model Development
- **Development Tools**: GitHub, GitLab, Visual Studio Code, Jira, Notion, Confluence