

# KELLY LAVERTU

Kennesaw, GA 30152 | (770) 608-5446 | kelly.lavertu@gmail.com | linkedin.com/in/klavertu

## PROFESSIONAL SUMMARY

Results-driven and analytically minded professional with a strong foundation in programming, mathematics, and education. Proficient in gathering, cleaning, and organizing data using Python, R, Java, and SAS. Eager to transition to a Data Scientist role, leveraging expertise in data analysis, statistical modeling, and machine learning for driving actionable insights and business success.

## SKILLS

- Python
- R
- SAS
- SQL
- MATLAB
- Java
- LaTeX
- Excel
- Data analysis
- Regression analysis
- Statistical analysis
- Data modeling and visualization
- Algorithm analysis and development
- Linear and logistic regression
- Decision trees
- Random forests
- Gradient boosting
- Convolutional Neural Networks (CNNs)
- Clustering
- Principal Component Analysis
- Generative Adversarial Networks (GANs)
- Deep learning

## PROJECTS

### Detecting Bacterial and Viral Pneumonia in Chest X-Ray Images – *Pandas, NumPy, and Matplotlib*

- Developed deep learning models using transfer learning, CNNs, and GANs to improve the accuracy of pneumonia detection in chest x-ray images

### Star-Galaxy Classification Using Machine Learning Techniques – *TensorFlow and Keras*

- Implemented decision tree models and CNNs for star-galaxy classification

### Digit Recognition

- Improved digit recognition accuracy from 96% to 97.6% using k-nearest neighbors and CNNs

## WORK HISTORY

### AP Computer Science Teacher

07/2021 to Present

#### Gwinnett County Public Schools, North Gwinnett High School – Suwanee, GA

- Analyzed and visualized student progress data using pivot tables, graphs, and charts in Excel
- Achieved a 94% passing rate on the AP exam in the first year of teaching
- Planned and implemented curriculum to teach Java to students grades 10-12

### Computer Science STEM Resident

07/2020 to 07/2021

#### GCPS, Gwinnett School of Mathematics, Science, and Technology – Lawrenceville, GA

- Mentored 140 students in computer science procedures and Java programming
- Provided an environment conducive to students' intellectual and emotional development
- Collaborated with a team to develop and revise assessments based on modern standards

### Programming Analyst

07/2017 to 09/2019

#### DATAMATX – Chamblee, GA

- Developed applications to automate document distribution, conducting full life cycle software development in multiple environments, resulting in an 90% reduction in manual effort
- Leveraged programming skills and analytical thinking to create 4 quick prototypes and proof of concepts per week while collaborating closely with clients
- Identified and resolved issues within applications, ensuring efficient data processing
- Prepared detailed analyses, plans, diagrams, and verification procedures to present to

customers and colleagues with both technical and non-technical backgrounds

---

**EDUCATION**

**Master of Science:** Computer Science, concentration in Data Science  
Kennesaw State University – Kennesaw, GA  
**Bachelor of Science:** Mathematics  
Kennesaw State University – Kennesaw, GA

*Expected 12/2023*

*12/2016*