

KELLY LAVERTU

Kennesaw, GA 30152 • (770) 608-5446

kelly.lavertu@gmail.com • [linkedin.com/in/klavertu](https://www.linkedin.com/in/klavertu) • [kellylavertu.com](https://www.kellylavertu.com)

PROFESSIONAL SUMMARY

Highly skilled and results-driven Data Scientist with a strong foundation in programming, mathematics, and machine learning. Experienced in analyzing complex datasets, developing predictive models, and data visualization using Python, R, Java, and SQL. Eager to leverage advanced data science techniques to extract valuable insights and optimize processes.

EDUCATION

Master of Science: Computer Science, concentration in Data Science 12/2023
Kennesaw State University – Kennesaw, GA
Bachelor of Science: Mathematics 12/2016
Kennesaw State University – Kennesaw, GA

SKILLS

- Python
- Java
- R
- SQL
- SAS
- MATLAB
- Deep Learning
- Data Analysis and Visualization
- Regression Analysis
- Decision Trees
- Random Forests
- Statistical Modeling
- Gradient Boosting
- Machine Learning

PROJECTS

Advanced Classification Techniques for Galaxy, Quasar, and Star Identification

- Created custom dataset by fetching images from Sloan Digital Sky Survey using SQL queries
- Achieved an 8% accuracy increase from previous methods by implementing Random Forest, XGBoost, and CNN models using Keras and Tensorflow

Detecting Bacterial and Viral Pneumonia in Chest X-Ray Images

- Applied Pandas, NumPy, and Matplotlib to develop deep learning models using transfer learning, Convolutional Neural Networks (CNNs), and Generative Adversarial Networks (GANs) to improve the accuracy of pneumonia detection in chest x-ray images

WORK HISTORY

AP Computer Science Teacher 07/2021 to Present
North Gwinnett High School – Suwanee, GA

- Interpreted and illustrated student progress data using pivot tables, graphs, and charts in Excel, driving improvements in curriculum and teaching methodologies
- Elevated Java proficiency among 10-12 graders, surpassing national AP exam pass rates by 40%

Computer Science STEM Resident (Student-Teaching) 07/2020 to 07/2021
Gwinnett School of Mathematics, Science, and Technology – Lawrenceville, GA

- Cultivated computer science skills in 140 students as a mentor
- Collaborated on developing assessments based on modern standards

Programming Analyst 07/2017 to 09/2019
DATAMATX – Chamblee, GA

- Streamlined document distribution, reducing manual processing time by 90% and accelerating delivery timelines
- Developed four weekly prototypes, aligning technical solutions with client needs
- Resolved application issues promptly, optimizing data processing and system performance
- Prepared and presented detailed analyses, plans, and diagrams to clients and colleagues with both technical and non-technical backgrounds